LECTURES

ON

THE ECONOMIC CONDITION OF ANCIENT INDIA

"Agriculture, cattle-tending and trade constitute *Vārtā*. It is serviceable in causing increase of grain, cattle, gold and other metals, and labour."

The Arthaśāstra

LECTURES

ON

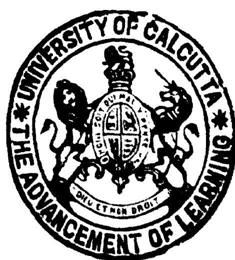
THE ECONOMIC CONDITION

OF

ANCIENT INDIA

J. N. SAMADDAR, B.A.,

BIHAR AND ORISSA EDUCATIONAL SERVICE



PUBLISHED BY THE

UNIVERSITY OF CALCUTTA

1922

By the same Author

1. *Samasāmayika Bhārata*—(In Bengali. To be published in 25 Volumes of which 9 are out).
2. *Prāchīna Bhārata*—(In English—in the Press).
3. *Culture of the Jātaka*—(Ready for the Press).
4. *Lectures on the Ancient History of India*—(Patna University Readership Lectures, 1922-23—Ready in 1923).
5. *The Science of Economics in Ancient India with special reference to the Arthaśāstra.*—(Ready in July, 1923).
6. *Economic History of Early India*—(In preparation).

PRINTED BY ATULCHANDRA BHATTACHARYYA
AT THE CALCUTTA UNIVERSITY PRESS, SENATE HOUSE, CALCUTTA.

C. U. Press—Reg. No. 11B—12.12.22—500.



SIR ASUTOSH MOOKERJEE

Frontispiece.

Dedicated

to

The Hon'ble Justice Sir ASUTOSH MOOKERJEE,

Kt., C.S.I.,

Sarasvati, Sastra-Vachaspati,

Sambuddhagama-Chakravarti,

Vice-Chancellor and President of the Councils

of Post-Graduate Teaching of the Calcutta University

as a token of affectionate regard.

PREFACE

The following pages, my first attempt in writing in English, represent five of the six lectures delivered by me last year on "The Economic Condition of Ancient India," to the Post-Graduate students of my *Alma-Mater*, the University of Calcutta. The sixth lecture on "Industrial and Trading Organisation" is being incorporated in my next book, *Prāchīna Bhārata*, while a short one on "The Rāmāyaṇa from the Economic Point" has been added to the present work.

It has not been found possible within the limits of half a dozen lectures, delivered on different occasions to batches of students, to deal at length with such a vast subject, and I was not able to arrange them in strict chronological order. Those attempted merely indicate its main sub-divisions; and I have illustrated my remarks, as far as possible, by full references to such internal evidence as is to be found in the literature of ancient India. So far, not much original work has been done in connection with this branch of research, complicated

and vast as it undoubtedly is. I cannot claim to be an authority. Mine are merely the attempts of a pioneer. And no one is more conscious than myself of the necessary imperfections of such an attempt. A good many of the views set forth by me are still matters of controversy, while others are merely tentative hypotheses. I shall, however, consider my labour amply rewarded if these pages ever inspire the keen student to take up this fascinating branch of historical research and help to reconstruct the story of economic life in ancient India.

I am indebted to a number of gentlemen for help and encouragement. I wish I could have produced the first fruits of my labour and placed them in the hands of my late Principal, Captain Charles Russell, I.A.R.O., who sacrificed his life in the Great War, and who had first encouraged me to study this branch of ancient Indian History. These lectures have been, with kind permission, dedicated to the Hon'ble Justice Sir Asutosh Mookerjee, Kt., C.S.I., Vice-Chancellor of the University of Calcutta, at whose kind suggestion they were undertaken and to whom the whole scholarly world is so much indebted. The Hon'ble Sir Maharajadhiraj Bahadur of Burdwan and the Hon'ble Sir Maharaja of Kasimbazar have extended to the present undertaking the same encouragement with which they had favoured

me on previous occasions. I would also like to mention specially the Hon'ble Khan Bahadur Syed Muhammad Fakhruddin, the Minister of Education of our Province, Mr. V. H. Jackson, M.A., I.E.S., Vice-Chancellor of our Patna University, and Mr. G. E. Fawcus, M.A., I.E.S., our Director of Public Instruction, who have all expressed a keen desire to see my first book. The Hon'ble Mr. S. Sinha, as Editor of the *Hindusthan Review*, has published from time to time, my articles on Economics, while Mr. E. A. Horne, M.A., I.E.S., the Principal of my College, as President of the Chanakya Society has always encouraged me by allowing me to read some of my papers before the Society. Kumar N. Law, M.A., B.L., P.R.S., Ph.D., the gifted scion of an ancient family, has assisted me in finding my way through the tangled mass of conflicting evidence. Without him, it would have been almost impossible to complete my book, and I feel I cannot adequately express my gratitude to him. I have also to thank Professor D. R. Bhandarkar, M.A., Ph.D., Mr. Gauranganath Banerjee, M.A., Ph.D., Mr. Pramathanath Banerjee, M.A., B.L., Mr. Ramaprasad Mookerjee, M.A., B.L., all of the Calcutta University, Prof. S. N. Majumdar, M.A., of the Patna College, Dr. R. C. Majumdar, M.A., P.R.S., of the Dacca University and Mr. R. K. Mookerjee, M.A., Ph.D., of the Lucknow

University for occasional help and advice. The Index has been prepared by my student Mr. Bhubaneswarprasad Sinha, M.A., B.L., to whom I am grateful.

As the proofs had to be corrected from a distance a number of mistakes have crept in. In the Errata have been mentioned only the more serious ones. The difficulty has been intensified by the fact that inspite of the so-called wastage by the Calcutta University, its Press has not had sufficient material to let me have the proof of the whole book in a lump and this has added to the trouble. It is a pleasure, however, to mention in this connexion the services and unfailing courtesy of Mr. A. C. Ghatak, B.A., the worthy Superintendent of the Press.

I propose to deal more systematically with this subject in my "Economic History of Early India." The present course of Lectures and the next on "The Science of Economics in Ancient India" are more or less preparatory to clearing the ground for my more ambitious work referred to above.

PATNA COLLEGE,
PATNA.
December, 1922.

J. N. S.

TABLE OF CONTENTS

INTRODUCTORY

LECTURE I

Primitive Economic Ideas.

LECTURE II

Economic Ideas of an Early Hindu Lawgiver

LECTURE III

The Rāmāyaṇa from the Economic Point

LECTURE IV

Some Economic Teachings of the Mahābhārata

LECTURE V

The Imperial Mauryas and Economic Development

ERRATA

Page 64: Last line—For "*But the ruler of ten*" read "*The ruler of twenty.*"

Page 65, line 7—add *twenty* after *the ruler of*.

Page 87, „ 15—read *word* for *work*.

Page „ „ 16—read *to* for *of*

88, „ 16—read *4* for *3* and add in the Footnote—*4 Sabha. V. 77 and 78.*

Page 105, line 1—delete *s* from *wrongs*.

Page 116, Footnote—Read *History* for *condition*.

Page 137, line 5—Read *Dr* for *Mrs*.

ECONOMIC CONDITION

OF

ANCIENT INDIA

INTRODUCTORY

MR. PRESIDENT, GENTLEMEN AND BROTHER-STUDENTS,

When your Hon'ble President very kindly suggested to me that I should deliver a short course of lectures on Ancient Indian Economic Conditions, I naturally hesitated to do so. No one is more conscious than myself of the difficulties of such an undertaking. The heavy duties of a teacher of history at the premier College of a Province are so onerous and taxing that I hardly find any time to do any research work. Far difficult it is for me, however interested I may be, to prepare a course of lectures in a particular branch, for the benefit of advanced students of a University, which I believe, is the biggest in the world and which, I am sure, is one of the foremost in advancement of learning. At the

same time while I was conscious of my shortcomings, I was anxious to take up this labour of love for my *Alma Mater* to whom I owe so much. I could not, at the same time, even think of refusing to comply with the request of your Hon'ble President who has done so much for the renaissance of true learning and resuscitation of that ancient Indian culture in which I along with so many of you are interested. It is quite true that men like Sir William Jones, Wilson, Colebrooke and Prinsep laid the foundations when they started the Asiatic Society of Bengal years ago but to the great Sir Asutosh, his worst enemies must admit, is due the grafting of a new life which has given such an impetus to the study of ancient Indian culture.

The subject of my course of lectures would be the economic condition of early India. As a student of history and economics I do not think there can be a more interesting or more profitable branch of study, however imperfect the facts which I am going to place before you, for these are merely sidelights only and it is certainly impossible to deal with such a vast subject, in course of half a dozen lectures. It was in 1901, *i.e.*, exactly two decades before, that Mrs. Rhys Davids first wrote on this interesting subject in the Journals of the Royal Asiatic and Royal Economic Societies. Since then, if I mistake not, not much work has

been done in this connection by scholars and what has been done, and I am glad to mention it, has been generally done under the fostering care of our Hon'ble President by scholars who are products of this University—our *Alma Mater.* When some ten years ago, *Āchārya* Max Müller delivered his course of lectures to the candidates for the Indian Civil Service (and we Indians are so much indebted to Max Müller), in reply to his own question, "What can India teach us?" he observed, "If I were to look over the whole world to find out the country most richly endowed with all the wealth, power and beauty that nature can bestow, in some parts a paradise on earth, I should point to India. If I were asked under what sky the human mind has most fully developed some of its choicest gifts, has most deeply pondered on the greatest problems of life and has found solutions of some of them which well deserve the attention even of those who have studied Plato and Kant, I should point to India. And if I were to ask myself from what literature we, here in Europe, we who have been nurtured almost exclusively on the thought of Greeks and Romans, and of one Semitic race, the Jewish, may draw that corrective which is most wanted in order to make our inner life more perfect, more comprehensive, more universal, in fact more truly human, a life not for this life only,

but a transfigured and eternal life, again I should point to India."

But even this sympathetic scholar, to whom we owe so much and who gave a long list to his I.C.S. students of the subjects which they could take up for profitable study in India—Geology, Botany, Zoology, Ethnology, Archæology, Numismatics and so on, failed to mention the study of the economic history of early India—an important branch of knowledge of which the beacon light was shown by Mrs. Rhys Davids who appealed for a reconstruction of the history of economic life in ancient India, holding forth the promise of a bumper harvest.

But no bumper harvest has yet been reaped and nobody is more responsible for this than we Indian scholars, and if in accepting the valued suggestion of your Hon'ble President I am able to give even the slightest impetus to one of you, make even one of you dream brighter and achieve some work in this very little trodden field, I shall deem my labour an unqualified success. In my lectures I have given full references and have avoided, as far as possible, hasty generalisations. I have given you some indications regarding the way in which you may profitably carry on further researches under the able guidance of your distinguished professors. There is a vast field of research before you. As Max Müller observed so happily, "Though many

great and glorious conquests have been made in the history and literature of the East, since the days when Sir William Jones landed at Calcutta, depend upon it, no young Alexander here need despair because there are no kingdoms left for him to conquer on the ancient shores of the Indus and the Ganges." Depend upon it, there are enough of fields and pastures anew, for you to work. The fruits of your labour will be abundant, "their color will be gorgeous, perfumes rich." You would be, not only unearthing the glories of your mother country, but you would be advancing towards higher points and nobler aims. And let us always remember that it was not by bloodshed and violence—India has always abhorred them—but by patient labour in the domain of literature that India rose to the highest pitch of culture and civilisation and it was for this that the poet very aptly observed:—

> "The East bowed low before the West in patient, deep disdain,
> She let the legions thunder past and plunged in thought again."

LECTURE I

PRIMITIVE ECONOMIC IDEAS

This evening I propose to take you to the earliest period of Aryan Civilization. Here, we have to refer to the literature of the Vedas, a literature as old as over 3000 years, according to some authorities. Their lyrical poetry, although far older than the literary monuments of any other branch of the Indo-European family, was "already distinguished by refinement and beauty of thought, as well as by skill in the handling of language and metre."[1] And, though this literature bears an "exclusively religious stamp" and "is meant to further religious ends,"[2] there are so many indications of economic conditions of all articles which the Gods are said to have created for the enjoyment and prosperity of the Indo-Aryans, that there is enough of justification for us to place a few of them before you, culled from this oldest literature in the Aryan world, giving a picture of the oldest civilization which the Aryans developed in any part of the world, a

[1] Macdonell: "*A History of Sanskrit Literature*," p. 29.

[2] *Ibid.*

civilisation which even at that time was an advanced and complex one—a civilisation which was not in any way inferior, if not superior, to the Egyptian and Babylonian.[1] And in this connection we would be altogether failing in our duty if we do not mention the name of the late Mr. R. C. Dutt who amidst his multifarious duties of an onerous nature could find time to devote to literary pursuits, and which, though slightly antiquated now, are entitled to our highest admiration being the pioneer in this direction. We would be only paying him our deep debt of gratitude by referring to him and to his labours, and on certain points by basing our lecture on the fruits of his labour. Likewise, we ought to pay our debt of obligation to that devoted admirer of India, Prof. Max Müller whose edition of the *Rig Veda* gave such an impetus to the study of Vedic literature. Wilson also rendered us a great help by his Translation of the *Rig Veda*, while Macdonell and Keith have, by their *Vedic Index* rendered research in this domain easier. Last, but not least, Pundit Durgadas Lahiri is enriching our mother tongue by his elaborate edition of the Vedas. For the first time in any of the provincial languages of India, the Veda is being edited in Bengali, and as Bengalees, we may certainly

[1] *Cf.* R. C. Dutt: "*A History of Civilization in Ancient India.*"

congratulate ourselves on the efforts of one of our countrymen.

I do not think there is any cause for regret to observe, as Professor Ragozin has done, that "it does not contain history in the direct narrative or epic form, but only in that indirect and fragmentary form which is internal evidence."[1] But this internal evidence is clear, categorical, and conclusive, so much so, that enough of essential facts can be obtained, even by a casual reader, and a really interesting and reliable presentation can be made of the Aryan advance from their first settlements in the Punjāb eastward into that vast region watered by the historic Ganges and Jamunā, which became the centre and head-quarters of the race when the Vedic era had glided by and merged into the Brāhmaṇic period.[2]

My learned friend Dr. Radhakumud Mookherjee in his book, "*History of Indian Shipping and Maritime Activity*" took as his motto two verses from the *Rig Veda* which sing, "Do thou whose countenance is turned to all sides send off our adversaries, as if in a ship to the opposite shore; do thou convey us in a ship across sea for our welfare."[3] And he has referred to a number of such passages which bear reference to the

[1] Ragozin: "*Vedic India,*" p. 303.
[2] *Ibid*, p. 305.
[3] *Rig.* 1. 97, 7 and 8.

sea-going habits of the ancient Indo-Aryans while living in the land of the Five Rivers. Indeed, not only do the Vedas refer to the sea-faring habits of the Indo-Aryans but also to their agricultural tendencies. In the words of Griffith, who has done so much to popularise early Hindu literature, "the young husband is an agriculturist, and we see him in his field superintending the ploughmen and praying to Indra and Pūshan and the Genii of Agriculture to bless their labours. Anon, with propitiatory prayer, he is cutting a new channel to bring the water of the brook to the land which is ready for irrigation; or he is praying for rain and an abundant crop. When the corn is ripe he is busy among the men who gather the harvest, invoking the aid of the good-natured goblins and leaving on the ground some sheaves to remunerate their toil. At sunset he superintends the return of the cows who have been grazing under the protection of the Wind-God in the breezy pastures, and their return under divine guidance and the re-union of all the members of the household are celebrated with symbolical mixt oblation, with milk and a brew of grain."[1] Such in short, was the life of the Vedic agriculturist.

India was and is an agricultural country, and agriculture has been all along the chief

[1] Preface to the *Atharva Veda*.

industry of the people. "The very name Ārya, by which the Aryan conquerors of India have distinguished themselves from the aborigines is said to come from a root which means to cultivate. Prof. Max Müller[1] has tried to trace the progress of the word all over the Aryan world from Iran or Persia to Erin or Ireland, and argues with considerable force that the word was invented in the primeval home of the Aryans in Central Asia to indicate their partiality to cultivation, as distinguished from the nomadic habits of the Turanians, whose name indicates their journeys, or the fleetness of their horses. Certain it is that the word Ārya is the one word in the *Rig Veda* which distinguishes the conquerors as a class, or even as a caste, from the aborigines of the country."[2] Indeed, it has been admitted on all hands that cultivation of the soil was known to the Indians before they separated from the Iranians, as is indicated by the identity of expressions

[1] Max Müller's theory that Ārya-cultivator and that the word Ārya was Pre-Indo-Aryan in origin has been discarded. Philologists now do not use that word in connection with any other section, except Indians and Iranians, of the Primitive Stock.

[2] R. C. Dutt: '*A History of Civilization in Ancient India*,' p. 38. Dr. Macdonell has also observed, "The Vedic Aryans had brought with them from beyond the Valleys of Afghanistan at least a primitive knowledge of agriculture, as is shown by the Indians and Iranians having such terms as 'to plough' (*Kṛish*) in common. This had, indeed, by the time of the *Rig Veda*, become an industry second only to cattle-breeding in importance." (*A History of Sanskrit Literature*, p. 166.)

Yavaṃ kṛṣ and *sasya* in the *Rig Veda* with *Yao karesh* and *hahya* in the *Avesta* referring to the ploughing in of the seed and to the grain which resulted.[1]

Let us take the following hymn and consider the prayer conveyed through its lines—we find in it the prayer which even to-day echoes in the heart of hearts of every Indian cultivator as it did in days of yore. The hymn is from the *Rig Veda*.[2]

"We will win this field with the Lord of the Field[3]; may he nourish our cattle and our horses, may he bless us thereby! O Lord of the Field! Bestow on us sweet, pure and butter-like delicious and copious rain, even as cows give us milk. May the Lords of the water

[1] *Vedic Index*, 1. 181. "In the *Rig Veda*, the Aśvins are spoken of as concerned with the sowing of grain by means of the plough. In the later Saṁhitās and the Brāhmaṇas ploughing is repeatedly referred to."

[2] IV. 57.

[3] "The use of this word *Kṣetra*, in the *Rig Veda* points clearly to the existence of separate fields carefully measured off, though in some passages the meaning is less definite, indicating cultivated land generally. In the *Atharva Veda* and later, the sense of a separate field is clearly marked, though the more general sense is also found. The deity, *Kṣetrasya Pati*, 'Lord of the Field' should probably be understood as the god presiding over each field. It is a fair conclusion from the evidence that the system of separate holdings already existed in early Vedic times." (*Vedic Index*, 1. 211.) Macdonell and Keith quote *Śatapatha Brāhmaṇa*, VII. 1, 1, 8 where the Kṣatriya with the consent of the people, gives a settlement to a man: *i.e.*, presumably assigns to him a definite *Kṣetra* for his own, probably measured out as recorded in *Rig*. 1. 110, 5.

bless us! May the plants be sweet unto us; may the skies and the rains and the firmament be full of sweetness; may the Lord of the Field, be gracious on us! We will follow him uninjured by enemies. Let the oxen work merrily, let the men work merrily, let the plough move on merrily. Fasten the traces merrily; ply the goad merrily. O Śuna and Sīra! accept this hymn. Moisten this earth with the rain you have created in the sky. O fortunate Furrow! proceed onwards, we pray unto thee; do thou bestow on us wealth and an abundant crop. May Indra accept this Furrow; may Pūshan lead her onwards! May she be filled with water and yield us corn year after year! Let the plough-shares turn up the sod merrily, let the men follow the oxen merrily; may Parjanya moisten the earth with sweet rains. O Śuna and Sīra! bestow on us happiness." In the above, various agricultural personifications are addressed, the deity of the first three stanzas being Kṣetrapati, of the fourth Śuna, the fifth and eighth Śunasīra, of the sixth and seventh Sītā, Śuna and Sīra being plough and ploughman. Mr. R. C. Dutt commenting on this hymn has well observed, "In these two remarkable verses the furrow, Sīta, is addressed as a female and asked to yield copious harvests. In the *Yajurveda* also, the furrow is similarly worshipped. And when the Aryans gradually

conquered the whole of India, and primeval jungles and waste lands were marked with the furrow, the furrow, Sītā assumed a more definite human character and became the heroine of the Epic which describes the Aryan conquest of southern India."[1]

Let us take another hymn—this time hymn 17, of the *Atharva Veda*, Book III.

"Wise and devoted to the gods the skilful men bind plough-ropes fast,
And lay the yokes on either side.
Lay on the yokes and fasten well the traces: formed is the furrow, sow the seed within it.
Virāj vouchsafe us hearing fraught with plenty!
Let the ripe grain come near and near the sickle.
The keen-shared plough that bringeth bliss, furnished with traces and with stilts,
Shear out for me a cow, a sheep, a rapid drawer of the car, a blooming woman, plump and strong!
May Indra press the furrow down, may Pūshan guard and cherish her.
May she, well-stored with milk, yield milk for us through each succeeding year.
Happily let the shares turn up the ploughland, the ploughers happily follow the oxen,
Pleased with our sacrifice, Śuna and Sīra!

[1] "*A History of Civilization in Ancient India,*" F. N., p. 39.

Make the plants bring this man abundant produce.

Happily be the traces bound. Happily the driving
goad.

Śuna and Sīra, welcome ye this land, and with
the milk that ye have made in heaven

Bedew ye both this earth of ours."[1]

The above is a simple farmer's song and prayer to speed the plough.[2]

Indeed the importance which was paid to agriculture can be best imagined when we know that Indra was awarded the title of Vritraghna as a reward for slaying Vritra, the chief cloud demon and fiend of drought, and in the next few pages we shall come to some more references to show the importance which was paid to agriculture. The references to agriculture in this primitive state of society are too numerous to be mentioned within the short compass of one lecture. We can do justice to very few, indeed.

[1] *Atharva*, but hymn 2 is taken from *Rig*. X. 101 ; hymn 5 is taken from *Rig*. IV, 57 with variations.

[2] 'The operations of agriculture are also neatly summed up in the *Śatapatha Brāhmaṇa* as "ploughing, sowing, reaping and threshing." The ripe grain was cut with a sickle, bound into bundles and beaten out on the floor of the granary. The grain was then separated from the straw and refuse, either by a sieve or a winnowing fan. The winnower was called *Dhānyakṛt* and the grain was measured in a vessel called *ūrdara* " (*Vedic Index*, I. 182).

Let us take for example the 21st verse of Hymn 117 of the first Book, which refers to ploughing and sowing barley [1] and milking out food for men, or the eighth verse of Hymn 28 of the tenth Book—" Burnt the grass up where they found it growing," Ludwig considering in this a reference to the beginning of agriculture. Hymn 101 of the same Book gives us a glowing picture of the agricultural habits of the Aryans where we read, " Fasten the ploughs, spread out the yokes and sow the seed on this field which has been prepared. Through song may we find hearing fraught with plenty ; near to the ripened grain approach the sickle. The ploughs have been fastened ; the labourers have spread the yokes ; the wise men are uttering prayers to gods. Prepare troughs for the drinking of the animals. Fasten the leather-string, and let us take out water from this deep and goodly well which never dries up. The troughs have been prepared for the animals ; the leather-string shines in the deep and goodly well which never dries up and the water is easily got. Take out water from the well. Refresh the horses, take up the corn stacked in the field and make a cart which will convey it easily." Ploughing is distinctly referred to in Book I, Hymn 23, Book VIII,

[1] "Rice cultivation seems hardly known in the *Rig Veda*. Rice grain is mentioned in the *Atharva*." (*Cf. Vedic Index*, I. 398.)

Hymn 20, and in Hymn 22 as well as in Hymn 166 of Book X.[1]

The other processes relating to agriculture are also often mentioned, *e.g.*, sowing is referred to, among others, in Hymn 94 of the tenth Book;[2] thrashing is mentioned in the 48th hymn of the same Book,[3] while we find winnowing in hymns 27 of the same.[4]

Agriculture had to depend on irrigation as it has to depend even now. In fact, in a country like India, water-storage was and is absolutely necessary. As has been well observed, "Irrigation is everything in India. Water is more valuable than land, it increases its productiveness at least sixfold and generally a great deal more and it renders great extents of land productive which otherwise would produce nothing or next to nothing."[5]

The Vedas contain many references to irrigation, wells,[6] water for irrigation,[7] irrigation of fields by means of canals,[8] cultivators irrigating

[1] "Ploughs with steers brings corn";
"Even as a plougher to his steers":
"Ploughed the first harvest";
"Like two plough-bulls ye move along the traces."

[2] "Tillers of the ground, when they are sowing seed."

[3] "Like many sheaves upon the floor, I thrash them."

[4] "Winnowing baskets."

[5] Sir Charles Trevelyan.

[6] *Rig.*, X. 25.

[7] *Ibid*, X. 93.

[8] *Ibid*, X. 99.

their fields[1] and digging the canal for the forward course.[2] In the *Atharva Veda* also, we come across such references. The best, as I think, is the one in Book III, Hymn 13 which was sung on the occasion of cutting a channel for irrigation, where in the seventh stanza, we have the practical part of the ceremony. The canal has been cut and the water of the river is to be admitted.

> "Here, O ye, Waters, is your heart. Here is your calf, ye holy ones.
>
> Flow here, just here, O mighty Streams, whither I am now leading you."

We may also surmise the importance of such channels, for in Book VII, Hymn 95 we have mention of the punishment to be meted out to the undiscovered thief, *viz.*, his conduit was to be bound.

Pasturage also was one of the important items of an agricultural people and though the allusions to it are not so frequent, yet there are strong indications that the Aryans also attached importance to it and a great portion of the wealth of rich men consisted in large herds of cattle. Ox and cow were among the chief sources of wealth to the Vedic Indian and are repeatedly referred to.[3] Leading on the meadows

[1] *Ibid*, X. 68.

[2] *Ibid*, X. 75.

[3] *Cf. Śatapatha Brāhmaṇa*, II. 4, 3, 13; III. 1, 2, 13; IV. 5, 6, 10; XIV. 1, 1, 32.

rich in grass[1] is mentioned, while Hymn 19 of Book X of the *Rig Veda* is another illustration of what the Aryans did in those days and their successors do now in these days :—

"We call thee cowherd, let him take out these cows; let him pasture them in the fields; let him know and pick out the animals; let him bring them back to the house; let him pasture them on all sides. The cowherd seeks for the cows and brings them back to the house; he pastures them on all sides. May he come home safe! O Cowherd! Pasture the cows in all directions, and bring them back. Pasture them in various parts of the earth and bring them back." In the words of Mr. Dutt, "we shall seek in vain in the entire range of later Sanskrit literature for a passage in which the humble hopes and wishes of simple agriculturists are so naturally described."[2]

Agricultural people have to suffer from famine and we note that even in the time of the Vedas, the people had to withstand the depredations of famine which now claims a large number of people as its victims every

[1] *Rig.*, I. 42. Thrice a day they were driven out to graze, according to the *Taittirīya Brāhmaṇa*, I. 4, 9, 2. "Strictly speaking the cows were driven out from the cattleshed in the morning, spent the heat of the day in the Saṃgavinī, were then driven out during the evening to graze, and finally came or were driven home, as is often mentioned." (*Vedic Index*, I. 232.)

[2] R. C. Dutt: "*A History of Civilisation in Ancient India*," p. 40.

year. In the 3rd Book, Hymn 8, offered to "drive far from and famine," while in Hymn 55, we are referred to the fact of Sasarpari dispelling famine. A similar prayer is offered in Hymn 18, Book VIII, to keep off famine, while in Hymn 55 of the same Book, Indra is invited to set the people free from famine. Hymn 42, Book X, also practically refers to the same fact.

Such, in short, was the agricultural life of the Aryans which has been described so well by Kaegi in the following words: "The principal means of sustenance was cattle-keeping. Repeatedly in the hymns we meet with the prayer for whole herds of cows and horses, sheep and goats, heifers and buffaloes, but specially of milch cows, which are, to more than one singer, the sum of "all good which Indra has created for our enjoyment" But by divine power the red cow yields the white milk from which is prepared mead and butter, the favourite food of gods and men, and perhaps also cheese. After the cattle, the most important interest is the cultivation of the soil. The ground is worked with plough and harrow, mattock and hoe, and when necessary watered by means of artificial canals. Twice in the year the products of the field, specially barley, ripen; the grain is threshed on the floor, the corn, separated from

by the winnowing, is ground in
le into bread."[1]

ry to give you a similar account
aders and merchants. Griffith
us: "The small merchant or
ss settled life and saw more
han the agriculturist. We see
oint of starting on a journey
rposes with his little stock of
t propitiates Indra who is a mer-
God who trades and traffics with
, requiring and receiving prayer
in exchange for the blessings
s, and who will now free the
chant's path from wild beasts,
emies of every kind. He prays
her deities that he may make rich
a hundred treasures, and commits
children and cattle in his absence
ie time he returns having bartered
he treasures of distant places.
hant's object in life is gain, and
's very scrupulous in his dealings.
bt he would prefer to be freed
entio of a God and not by his
, and he is bold enough even to

lso *Vedic Index*, II. 334. "It would be
ya Vaiśyas did not engage in industry
rsuits and agriculture must have been

absurd to
and comm
their sorw

pray for release from debts wh
without intending to pay then

Having thus given an ide
Vedic merchant lived, we
explain some of the points
throw some more light on t
"But among the many wond
celebrated and they are ver
so loud and so often as t
whom his father Tugra left
of the swelling waves, as a
his possessions. Tossed a
he calls upon the youthful
are mindful of him, accord
hasten up with their re
harnessed, in their chario
In the sea, which is witho
and unresting, they acc
work; the struggling ma
hundred-oared craft and t
culous power, bear the ex
in mid-air to his home on
rolling sea, journeying th
by day."[2] As the poet h

> "Yea, Aśvins, as a dead
>
> Tugra left Bhujyu in

[1] Introduction, p. 13.

[2] Kaegi, *The Rigveda*, p. 52. C
4; 1, 119, 4; 1, 116, 5; 10, 143, 5

back in animated vessels, traversing
by the billows.
winged things,
three nights, three days full

the strand of ocean,
footed, with six

a ocean which

Wh... ...welling,
b... O
Aśvi...

There are also
the mercantile and
Aryans, *e.g.*, in Hymn
we come across the prayer
which many crave, from th
another hymn of the same
reference to those who seek gain
to the flood. There is a still
reference in the fifth Book, hymn 45,
find "a wandering merchant gained h
water." Likewise in the sixth Book, h
45 refers to Paṇis usually identified with me
chants and traders. The merchant Bṛbu is
eulogised for his piety and liberality. Apparently

[1] 1. Hymn, 116.

Bṛbu was also a Paṇi,[1]
the *Rig Veda* might b
was one who had
If so, Paṇi must h
in a good sense,

It seems s
of the emi
'*History*
taken s
perso
sch

have
I am
all true
and though
this question,
always liberal

ion of the Aryan
to have extended at
s of the *Rig Veda* were
nd the point where the
Panjāb flow into the Indus.
obably known only from hear-
ntion is made of the numerous
e Indus, and fishing, one of the
ations on the banks of the Lower
the present day, is quite ignored. The
for fish (*matsya*), indeed, only occurs once,
gh various kinds of animals, birds, and

[1] It is not certain who these Paṇis were. They were also very likely Āryas who made themselves prominent by their trading and mercantile habits.

[2] *Cf. Vedic Index*, II. 70.

d. This
of the
oor

in
known
Veda, wh
spread muc
also to the sout
regular name fo
therefore, in agreem
sense (‘collection of wa
Rig Veda only, the lower
which, after receiving the wate
is so wide that a boat in mid-strea
from the bank. It has been note
times that the natives in this region spea
river as the “sea of Sindh;” and indeed
word *sindhu* (“river”) in several passages of t
Rig Veda has practically the sense of the “sea.”
Metaphors such as would be used by a people familiar with the ocean, are lacking in the *Rig Veda*. All references to navigation point only to the crossing of rivers in boats impelled by oars, the main object being to reach the other bank.[1] This action suggested a favourite figure, which remained familiar throughout Sanskrit literature. Thus one of the poets of the *Rig Veda* invokes Agni with the words, “Take us

[1] *Pāra*.

across all

(sindh

one

ed his

having

Veda, on

assages showing

inted with the

follow him The refer-

e so clear. He identifies

he Western *samudra*, but then

he *Púrva samudra* which we also

rther, the *Rig Veda* speaks of four

, and we meet with expressions which

ate the unfathomable depths of the sea.

deed, many scholars have admitted the Aryans as a "maritime and mercantile people," "familiar with the ocean and its phenomena," "pressing earnestly on board-the-ship for the sake of gain," engaging in "a naval expedition against a foreign island in which they were frustrated by a shipwreck."[3]

Not only Macdonell and Kaegi, but also Hopkins has observed, "Some scholars

[1] Pāraga.

[2] Macdonell, '*A History of Sanskrit Literature*,' p 143 ff.

[3] It is to be admitted that there is great divergence of view regarding this question. *E g.*, Ragozin also thinks that the Aryans of the Punjab were unacquainted with the sea or with the construction of sea-going ships. Prof. Hopkins is also of this opinion. *Vide* in this connexion chap III of Mr. A. C. Das's recently published book, "*Rig-Vedic India.*"

believe that this people had already heard of the two oceans. This point again is doubtful in the extreme. No description implies a knowledge of the ocean, and the word for ocean means merely a "confluence" of waters, or in general, a great oceanic body of water like the air. As the Indus is too wide to be seen across, the name may apply in most cases to this river." But it was voyaging in ocean as is conclusively clear from the following verse, hymn 88, Book VII.

> "When Varuṇa and I embark together and
> urge our boat into the midst of ocean;
> We, when we ride o'er ridges of the
> waters, will swing within that swing."

Referring to this, Macdonell and Keith whom we have several times quoted rightly observe, "it is not easy to refuse to recognize here the existence of larger vessels with many oars used for sea voyages."[1] The testimony of Dr. Sayce that the commerce by sea between India and Babylon was carried on as early as 3000 B.C., the age of the *Rig Veda*, is worth its full consideration.[2]

[1] "*Vedic Index*," I. 462

[2] "There was trade between Babylonia and people who spoke an Aryan dialect and lived in the country watered by the Indus" (Hibbert Lectures). Dr. Caldwell in his "*Grammar of the Dravidian Languages*" has also observed, "It appears certain from notices contained in the Vedas that the Aryans of the age of Solomon practised foreign trade in ocean-going vessels."

The *Vedic Index* sums up admirably the whole question. "It is certainly against the theory of the existence in Vedic times of an extensive sea trade that there is no mention of any of the parts of a ship, such as masts and sails, except the oar (Aritra). Yet there are some allusions indicating a trade more extensive than that implied by boats used for crossing rivers. The Atharvaveda compares the ruin of a kingdom where Brahmins are oppressed to the sinking of a ship which is leaking (*bhinnā*); though the language here employed can be made to fit the theory that the ship was only a canoe, it cannot naturally be so interpreted. Moreover, there is mention made in the Rigveda of men who go to the ocean (Samudra) eager for gain.[1] It is not altogether satisfactory to restrict such references with Zimmer to the broad stream of the Indus after the union of that river with the tributaries of the Panjab."[2] And again "*Samudra* is a frequent word in the Rig Veda and later. It is of importance in so far as it indicates that the Vedic Indians knew the sea. This is, indeed, denied by Vivien de Saint Martin, but not only do Max Müller and Lassen assert it, but even Zimmer, who is inclined to restrict their knowledge of the sea as far as possible, admits it in one passage of the Rigveda, and of course later.

[1] *Saniṣyavaḥ.*

[2] "*Vedic Index,*" I. 461.

He points out that the ebb and flow of the sea are unknown, that the mouths of the Indus are never mentioned, that fish is not a known diet in the Rigveda and that in many places Samudra is metaphorically used, as of two oceans, the lower and the upper oceans, etc. In other passages he thinks that Samudra denotes the river Indus when it receives all its Panjab tributaries. It is probable that this is to circumscribe too narrowly the Vedic knowledge of the ocean, which was almost inevitable to people who knew the Indus. There are references to the treasures of the ocean, perhaps pearls or the gains of trade and the story of *Bhujyu* seem to allude to marine navigation."[1]

Mercantile and trading habits are closely connected with the construction of ships and shipping, and there are numerous references to this in the Vedas. For example, even in the very first Book, in hymn 25, Varuṇa is referred to as "knowing the ships that are on the sea," while in hymn 97 of the same Book, Agni is thanked for conveying them for their advantage over the flood in a ship, and again in Book V, hymn 25. In Hymn 131 of the first Book, Indra is thanked for furthering their cause like a ship. Similarly Sūrya is drawn in a ship through water by wise men,[2] while thanks have also been conveyed to

[1] "*Vedic Index*," II. 432.

[2] *Rig* V. 45.

the Maruts for driving along like ship over the broad fields.[1] Shipwrecks are referred to in the same Book,[2] while "golden ships" of Pūshan are mentioned in the sixth Book.[3]

That sea-trade was a profitable concern is evident from hymn 18 of the eighth Book, where the Vasus are solicited for carrying them in their ship, "beyond all troubles and distress," and similarly in the 72nd hymn where a request is made to transport them over many woes. Safety also demanded the use of ships as we find in Book X, hymn 178, while ship-building is distinctly referred to in the same Book, hymn 101, "build a ship equipped with oars for transport." Sea-faring habits were, of course, fraught with danger, as we find in hymn 64 of the same Book for "billows smite a ship."

Although Kaegi has expressed the opinion that, "in arts, the race still stood on the lowest stage,"[4] there are pasages in the *Rig Veda* from which we can conclude that many arts were carried to a high state of excellence. Weaving, for example, was an industry which was much in vogue. Female weavers are referred to both in II. 3, 6 and in II. 38, 4, while there is a fling at spinsters who spin out

[1] *Ibid*, 56.
[2] *Ibid.*, 59.
[3] *Ibid.*, 58.
[4] Introduction, p. 40

their thread in ignorance.[1] One hymn refers to Agni for light regarding the mysteries of sacrifice but the language used is that of weaving,—"I know not either warp or woof, I know not the web they weave."[2] Weaving is also referred to in X. 130, 1. One passage is particularly significant as referring to the weaving and bleaching of sheep's wool, "weaving the raiment of the sheep and making raiment beautiful,"[3] while in the *Atharva Veda*, a woolen coverlet is mentioned.[4] There is no doubt that the wool of the sheep was requisitioned for the Soma filter,[5] and the reference to *Syuta* indicates the use of "linen corselets."[6] And well might Ragozin observe, "The Aryan settlers of Northern India had already begun, at an amazingly early period, to excel in the manufacture of the delicate issue which has ever been and is to-day doubtless in incomparably greater perfection—one of their industrial glories, a fact which implies cultivation of the cotton plant or tree."[7]

But perhaps the best reply to Kaegi are the various references to working in metals from

[1] X. 71, 9.
[2] VI. 9, 2.
[3] X. 26, 6.
[4] XIV. 2, 66 and 67.
[5] VIII 86.
[6] I. 31, 15 and X. 101, 8.
[7] "*Vedic India*," p. 306.

the description of various goods, ornaments and iron-utensils and implements of war found throughout the *Rig Veda*. For example, smelting is referred to distinctly in two passages as well as a caldron of metal.[1] And though little is known of the smith's methods of work and of his tools, his bellows of birds' feathers with which he smelted are distinctly mentioned.[2] He made metal vessels for putting on the fire, as well as domestic utensils of metal, and even the Soma-cup was occasionally made of hammered metal.[3] Scholars have admitted that six metals, *viz.*, gold, ayas, syāma, loha, lead and tripu were known.[4] In the *Atharva Veda*,[5] the sense of iron in one passage [6] being certain, and of the other metals, as Macdonell and Keith observe, "copper is conceivable and bronze quite likely."[7]

The best references in this connection are those which speak of the weapons of war and of the various gold ornaments, iron utensils and implements of war which are to be found

[1] V. 9. 5 and VI. 3. 4.

[2] "Mention is also sometimes made of the smith who smelts the ore in a forge, using the wing of a bird instead of a bellows to produce a draught. He is described as making kettles as well as other domestic utensils of metal" (Macdonell, "*A History of Sanskrit Literature*, p. 167).

[3] "*Vedic Index*," I. 140.

[4] *Ibid*, I. 131.

[5] XI. 3, 17.

[6] *Rig. V.* 25.

[7] "*Vedic Index*," I. 32.

throughout the *Rig-Veda.* Coats of mail for war,[1] golden-coloured mail,[2] helmets of gold,[3] spears and weapons bright with gold,[4] daggers, spears, quivers, arrows, bows[5] are frequently found, while in IV. 34. 9, there is the distinct mention of making of armour. We also find the word *Ayas* many a time in the Rig and other Vedas, which has been rendered as iron, (though some have taken it to mean gold).[6] Of course, the largest number of references are in the *Atharva-Veda.*[7]

There is an interesting question as to whether coins existed in the Vedic period. Prof. Kaegi referring to it observe that, "trade existed only in barter,[8] the foundation of which as well as the money-unit is the cow, in references to which all things are valued":[9] Macdonell and Keith also say, "sale appears to have regularly consisted in barter in the

[1] Rig. VI. 75. 1.

[2] *Ibid*, IV. 53. 2.

[3] II. 34. 3.

[4] V. 52. 6.

[5] Possibly the arrow of the Rig was painted with iron. "In the hymn of the Rig which gives a catalogue of armour two kinds of arrows are distinctly referred to: the one is poisoned and has a head of horn; the other is copper-, bronze- or iron-headed." *Vedic Index*, I. 81.

[6] *Cf.* VI 47. 10 and VI. 3. 5. In the *Black Yayurveda* as well as in the *White* we find *ayas* which evidently refers to iron.

[7] XI. 3. 1; V. 281; VI. 63; VIII. 3. 2.

[8] Substances used as barter—*Vasana* (or pieces of cloth of definite value), *go-puchchha.*

[9] Introduction, p. 114.

Rig-Veda" and again, "there is little evidence of a standard of value in currency having been adopted."[1] Further, "cattle formed one of the standards of exchange and valuation."[2] Other authorities are not prepared to accept this view. Mr. R. C. Dutt observed,[3] "In one remarkable verse, we are reminded of the finality of a sale-transaction. When once the sale is completed, one sells a large quantity for a small price, and then goes to the purchaser and denies the sale, and asks for a higher price. But he cannot exceed the price once fixed on the plea that he has given a large quantity. Whether the price was adequate or inadequate, the price fixed at the time of sale must hold good."[4]

Mr. Dutt then goes on to say, "A passage like the above would indicate the existence of current money for the purposes of buying and selling. We have instances of *Riṣis* acknowledging the gift of a hundred pieces of gold[5] and there can be no doubt, pieces of gold of a certain

[1] *Vedic Index*, I. 196. But the learned authors themselves admit "that in a considerable number of passages of the *Śatapatha Brāhmaṇa* the expression 'Hiraṇyaṃ-Śata-Mānam' suggests that there must have been some standard other than cows. Necklets (Niṣka) seem to have been one of the more portable forms of wealth." *Vedic Index*, I. 197.

[2] *Vedic Index*, I. 234.

[3] R. C. Dutt, *A History of Civilization in Ancient India*, p. 43.

[4] IV. 24. 9.

[5] V. 27. 6.

fixed value were used as money as indicated in these passages."[1]

There is doubt as regards the interpretation of the passage quoted by Mr. Dutt, but every one will agree with him, when he says that, "it must be admitted that there is no distinct allusion to coined money in the *Rig-Veda*"[2] as well as with Kaegi when he observes, "the transition to use of coined money was being prepared by the various golden ornaments and jewellery; active tradesmen and usurers come to view; while the occurrence of the Babylonian mina as an accepted gold standard proves, in connection with other facts, a very early intercourse between India and the Western Semitic Colonies."[3] Macdonell and Keith observe rightly that, "a gold currency was evidently beginning to be known in so far as definite weights of gold are mentioned."[4] Indeed, there may not be coins in the sense, in this period, in which we take it now, but very few would be prepared to accept the dictum of Mrs. Rhys Davids and say that,

[1] R. C. Dutt, p. 43. "Lanormant laid great stress on the use of the word *māna* a word which can be traced to ancient Chaldea or Semitic Babylonia with the same meaning and which afterwards passed into the Greek monetary system." *Cf. Vedic Index*, II. 129.

[2] R. C. Dutt, *A History of Civilization in Ancient India.*

[3] Kaegi, the *Rig-Veda*, Introduction, p. 14.

[4] *Vedic Index*, II. 505. "A weight, *aṣṭā-prūḍ*, occurs in the Saṃhitās and the golden Śatamāna (weight of a hundred Kṛṣṇalas) is found in the same texts. In several passages, moreover, *hiraṇya* or *hiraṇyani* may mean "pieces of gold."

"in the Vedic age all exchange was by barter."[1] Barter, of course, formed the important item, the cow being the pecuniary standard by which the value of everything was generally measured, "the transition to coinage being made by the use of gold ornaments."[2] "A hundred *Niṣkas* from the King, beseeching a hundred gift steeds I at once accepted," is a passage which is very important, for the singer "could hardly require the *Niṣkas* merely for purposes of personal adornment."[3]

As I have said above, presents of cows are frequently referred to and I hope you will permit me to mention certain passages where we meet with the presents of cows[4] as well as of other beasts and things. The list would give us

[1] J. R. E. S., 1910.

[2] *Vedic Index*, I 196. "*Kraya* (sale), is a word which does not actually occur in the *Rig-Veda* though the verb *krī*, from which this noun is derived, is found there......Sale appears to have regularly consisted in barter in the *Rig-Veda*." And again, "Cattle were certainly the objects of individual ownership and they formed one of the standards of exchange ,and valuation." (*Ibid*, I. 234). *Cf.* Also Macdonell, *A History of Sanskrit Literature*, p. 187. "Trade consisted in barter, the cow being the pecuniary standard by which the value of everything was measured. The transition to coinage was made by the use of gold ornaments and jewelry as a form of reward or payment as the case among the ancient Germans. Thus *niṣka* which in the *Rig-Veda* means a necklet, in later times became the name of a coin." *Cf. Vedic Index*, II. 167.

[3] *Vedic Index*, I. 455. Dr. Thomas was the first to draw the attention of scholars to this significant passage.

[4] "The importance attached to the possession of cattle is shown by the numerous passages in which the gods are asked to prosper them and by the repeated prayers for wealth in kine." *Vedic Index*, II. 233.

an idea of the economic value of these presents as well as of the wealth of the Vedic Indians.

In Book V, Hymn 30, we find that four thousand cattle which formed at the time the main item of wealth, were presented. In the same hymn, kine in thousands are referred to, as well as four thousand heads of cattle. In VI. 47. 22, we find ten coffers and ten mettled horses, ten treasure-chests and ten garments, ten lumps of gold, ten cars with extra steed to each and hundred cows. In Book VIII, Hymn 1, we find two brown steeds, ten bright-hued oxen and ten thousand cows while in VIII. 4. 21, a singer drives away, as the reward of his songs, sixty thousand whole herds of cows, kine in plenty and steeds also in plenty so that "the very trees were joyful at the coming." The next hymn sings of a reward of a hundred head of buffaloes and ten thousand kine, while in the hymn following, we have, "a hundred thousand have I gained from Parșu, ten thousand head of kine, and steeds three times a hundred and buffaloes yoked in fours." A King, Chitra, is referred to in the twenty-first hymn of the same Book, as having made a gift of thousand myriad gifts. We also read of a magnificent gift.—

> "Steeds sixty thousand and ten thousand kine,
> and twenty hundred camels I obtained;[1]

[1] "Large herds of cattle were well-known, as is shown by the *Dāna-stutis*, or 'praises of gifts' in the *Rig-Veda* even when allowances are made for the exaggeration of priestly gratitude." *Vedic Index*, I. 233.

Ten hundred brown in hue, and other ten red in three spots: in all, ten thousand kine.
Ten browns that make my wealth increase, fleet steeds whose tails are long and fair,
Turn with swift whirl my chariot wheel;
He gave a chariot wrought of gold: the prince was passing bountiful, and won himself most lofty fame.

....

So, as a prize dear to the strong, the sixty thousand have I gained,
Bulls that resemble vigorous steeds.
To me came oxen like a herd, yea, unto me the oxen come.
And in the grazing herd he made a hundred camels bleat for me,
And twenty hundred mid the white."[1]

Perhaps it is unnecessary to add further details showing the economic wealth of the Indo-Aryans.

I have tried to give in the above a bird's eye view of the economic life of the Aryans. Undoubtedly there were coarseness and imperfections, but at the same time, there was robust, manly and straightforwardness in their culture, and we cannot but feel, "a warm appreciation of the manly freedom of this ancient Hindu Civilization and life." The *Rig-Veda* itself has observed,

"Morning comes, the nurse of all,

[1] Rig. VIII. 46.

Like a Matron, at whose call all that dwell the house within
Their appointed task begin."

Our Hon'ble President also observed the other day, "Search for the truth is the noblest occupation of man ; its publication a paramount duty." The morning, as the hymn quoted above says, has really come and it is for one and all of us to utilise the day in the search for truth—the advancement of learning—which is the motto of our much-revered *Alma Mater*. The poet has truly observed,

"Far, like the comet's way through infinite space,
Stretches the long, untravell'd path of light,
Into the depth of ages,"

and we have tried to draw your attention to it.

LECTURE II

ECONOMIC IDEAS OF AN EARLY HINDU LAW-GIVER.

The subject of this evening's lecture is, "Economic ideas of an early Hindu Law-giver." I do not propose to go into the vexed question of the age of this "earliest" (?) law-giver. We may not agree with Hopkins that, "what is found in Manu may be as old as the Vedas or older, but on the other hand, it may be as late as 200 B.C.,"[1] but all would concur with the author of *Indian Wisdom* and say that, "even if not the oldest of post-Vedic writings, it is certainly the most interesting as presenting a picture of the institutions, usages, manners and intellectual condition of an important part of the Hindu race at a remote period.... It is in other respects, perhaps, one of the most remarkable books that the literature of the whole world can offer,"[2] —a view, so well-expressed by Burnell that, "No Indian book has been better known for the last hundred years nearly than the so-called 'Laws of Manu,' and to many people it is still the

[1] *Land Tenure in India*, p. 208. *Cf.* Burnell's *Introduction to the Mānava-Dharma-Śāstra.*

[2] *Indian Wisdom*, p. 212.

decisive authority respecting India."[1] And, although in its original form it very likely represented the rules and precepts of one tribe only, gradually it secured for itself a very high place, perhaps second to that accorded to the Vedas and so far as Hindu jurisprudence is concerned the chief place.[2] And although we may not be prepared to say that the god Brahmā having framed this system of laws himself taught it fully to Manu, who then in his turn, taught it to Maríci and the nine other sages, with authority to Bhṛgu to declare the code to the seers, we may agree with Elphinstone and say, "its injunctions are drawn from the model to which it is wished to raise the community and its prohibitions from the worst state of crime which it was possible to comprehend...It seems rather to be the work of a learned man, designed to set forth his idea of a perfect commonwealth under Hindu institutions. On this supposition it would show the state of society as correctly as a legal code; since it is evident that it incorporates the existing laws, and any alterations it may have introduced with a view to bring them up to its

[1] Introduction to *Mānava-Dharma-Śāstra*.

[2] Sir William Jones aptly says, "A spirit of sublime devotion, of benevolence to mankind and of amiable tenderness to all sentient creatures, pervades the whole work; the style of it has a certain austere majesty, that sounds like the language of legislation and extorts a respectable awe; the sentiments of independence on all beings but God and the harsh admonition even to kings, are truly noble."

preconceived standard of perfection, must still have been drawn from the opinions which prevailed when it was drawn."[1] These pregnant words of a historian are worth their weight in gold.

Somehow or other, agriculture in the days of Manu, was not looked upon favourably. Some people thought agriculture to be an excellent thing, but "by the good, this occupation is blamed" and the reason was that, "the iron-faced block of wood smites the earth and also the animals dwelling in the earth."[2] A Brāhmaṇa or even a Kṣatriya, when living by the means of livelihood enjoined for a Vaiśya, was to avoid agriculture carefully as "it caused pain and is dependent on other creatures."[3] And it was only in times of distress that agriculture could be resorted to by them.[4]

[1] Elphinstone, *History of India*, p. 13.

[2] X. 84. The other forbidden occupations were selling condiments, sesamum stores, salt and cattle. *Cf*. Śukra-Nīti, IV. 3. 37.

[3] *Ibid* X. 83. Manu in X. 81 and 82, however, observes, that a Brāhmaṇa might in distress live by the occupation of a Kṣatriya, or even that of a Vaiśya. Mitākṣarā thus explains it: "A twice-born person, that is, a Brāhmaṇa, when by reason of being depended upon by a large family, is unable to subsist by the occupation of his own caste, might live by the occupation belonging to a Kṣatriya, *i.e.*, by such things, as bearing arms and so on, at the time of distress When he is not able to live even by that, he might live by the occupation belonging to a Vaiśya, such as trade, etc., but not by the profession of a Śūdra."

[4] X. 116. *Cf*. X. 86-89. When a Brāhmaṇa was compelled to give up the pursuit of his own proper calling, he was not allowed to be an out and out Vaiśya. He could not sell fruits, linen, soma, slaves, wheat, cake, etc.

This state of things was due to the caste system which had taken a deep root. In the very first passage, we are told how the great seers having approached Manu requested him to tell them the rules regulating all the castes and mixed castes (*i.e.*, those castes that arise between them), and the Vaiśyas had already agriculture allotted to them as their profession. "Let the Vaiśya, having been girt with his proper sacrificial thread and having married an equal wife be always attentive to his business of agriculture and to that of keeping cattle."[1] In fact one of the duties of the Vaiśya was "to trade, to rear cattle, and agriculture."[2] It was considered derogatory to a Vaiśya not to keep cattle, the accompaniment of agriculture,[3] for "when the lord of creatures created cattle, he made them over to the Vaiśya and a Vaiśya must never wish, "I will not keep cattle."[4] The Vaiśya was required to be "acquainted with the manner of sowing seeds, and of the good and bad qualities of fields."[5] If

[1] IX 326.

[2] X. 79. *Cf.* also I. 90 which says, 'Tending of cattle, giving alms, sacrifice, study, trade, usury and also agriculture for a Vaiśya." *Cf.* also VIII. 410. Usury, in general, was condemned, the food of an usurer was not to be taken. IV. 210 and 220.

[3] IX. 327.

[4] IX. 328. A similar statement is found in the Mahābhārata.

[5] IX. 330. His other duties were, to be well-acquainted with the application of measures of weights in all their particulars: Also the comparative worth of goods, the good and bad qualities of (different) districts and the propagation of cattle. He was also to know all about purchase and sale. Manu, IX. 331-333.

land was injured by the fault of the farmer himself, *i.e.*, if he failed to sow it in due time, he was fined ten times as much as the king's share (of the crop, that might otherwise have been raised) and only five times as much if it was the fault of his servants without his knowledge."[1] But we find that the King in the *Mānava-Dharma-Śāstra* was enjoined to look to the eight items of his business,[2] one of which was agriculture, the other seven being, trade, roads, forts, bridges, elephant-training, taxes and the occupation of desert-places.[3] On the whole, therefore, we are prepared to think that it is because of the nature of the rules by which the Brāhmaṇas sought to secure their own ascendancy and perpetuate an organised caste-system in subordination to themselves that agriculture was forbidden to Brāhmaṇas.

Mr. Baden Powell came to the conclusion that the "upper classes of Aryan origin had little feeling for agriculture, and that India does not owe to them either the introduction of settled cultivator or (directly) particular policy or principle of landownership."[4] The same conclusion was arrived at by Sir William Hunter

[1] VIII. 243.

[2] VII. 154.

[3] Very likely it referred to colonisation. IV. 210, 215, 216 and 219 are interesting as showing some of the occupations which were looked down upon.

[4] *The Indian Village Community*, p. 192.

who observed, "we know that the Aryan invaders never penetrated in sufficient numbers into India to engross any large proportion of the soil. That throughout five-sixths of the continent, the actual work of tillage remained in the hands of the Non-Aryan or Śūdra races, and that even at a remote time, husbandry had become as degrading an occupation in the eyes of the Aryan conquerors as the tending of sheep was to the Mosaic Pharaos."[1]

The whole thing, to say the least of it, is unsatisfactory, and goes against the very idea of ancient Hindu organisation. Mr. Baden Powell's argument is as follows: "The Vaiśya (the term is now applied to a caste), is represented by the Merchant whose business is with trade and with buying grain and other goods; he is regarded also as the owner of flocks and herds. The cultivation of land is only casually thrown in among his permissible occupations as a subsidiary matter. And even so, the expression used seems quite possibly to refer to agricultural land-holding, not as a personal occupation but as a means of employing capital."[2] And he cites as an instance the present-day Kshatri and Baniya as eager to buy and hold land as an investment.

We hold with Hopkins, that the above is a startling statement, as the importance of

[1] Hunter, *Orissa*, Vol. II, 206.

[2] *The Indian Village Community.*

agriculture and agricultural labour was alluded to in the very earliest Aryan literature. We have already shown in our first lecture how agriculture was considered by the Vedic Indians. In the Brāhmaṇs and the Sútras, "we find not constant allusions to agriculture, but also plain evidence of the fact that Vaiśyas were particularly agriculturists, and the members of the warrior caste and the priest caste were very apt to adopt the same occupation."[1]

Prof. Hopkins has very clearly explained the reasons why the Brāhmaṇas hated agriculture, and we can do no better than quote him. "Long before Manu's law-book was known, had arisen the famous Ahiṁsā doctrine, of non-injury to living creatures; and the objections to agriculture on the part of the priest is based expressly on this ground in the law-books."[2] He then further explains by

[1] Hopkins, *India—Old and New*, p. 211.

[2] *Ibid*, p. 212. *Cf.* what V. A. Smith observes on the Ahiṁsā doctrine. "The sentiment in favor of respecting animal life, technically called the ahiṁsā doctrine, had a large share in fixing on the necks of the people burdensome rules of conduct. That sentiment, which is known to have been actively encouraged by Jain and Buddhist teachers from about 500 B.C probably originated at a much earlier date. The propagation of ahiṁsā necessarily produced a sharp conflict of ideas and principles of conduct between the adherents of the doctrine and the old-fashioned people who clung to bloody sacrifices, cow-killing and meat-eating. Communities which had renounced the old practices and condemned them as revolting impieties naturally separated themselves from their more easy-going and self-indulgent neighbours, and formed castes bound strictly to maintain the moral code of ethics." *The Oxford History of India*, p. 38.

analogy : "But as to-day and in the last century in Rājputana, so in ancient times, recourse to agriculture was the first thought on the part of the upper castes, and agriculture was the usual occupation of the third caste. It is true that the upper castes had no feeling "for agriculture, but noblemen and priests, as a general thing, have feeling neither for agriculture, nor for trade." Mr. Baden Powell himself has observed, "so far as the early Aryans are concerned, agriculture appears to have been in no disrepute, nor can we learn whether it was the business of any particular tribe or class. It is probable that the very fact of settlement would have effected a sort of natural division of labour and adjustment of suitable occupations. Some of the tribes or families would take agriculture, and these would form the majority of those who remained stationary when the rest moved on." This is all quite true, but "naturally, therefore," as Mr. Baden Powell goes on, "the farther the Aryan moved into India, the more would the advancing body be composed of Brāhmaṇas and fighting tribes, who would be disposed to relegate agriculture to the humbler classes and to the conquered aboriginies and the mixed races who so soon sprang up and multiplied." We do not know by what process of reasoning could the learned author come to this conclusion. The rear guard of an army is as important as the

vanguard—both are mutually dependent. It may be that the more adventurous who would go on in advance may gain a greater share in the plunder but we fail to understand why those who would have to remain behind to look after the base and also keep in check the Non-Aryans by whom they were surrounded, should be condemned and classed with the Non-Aryans. Indeed, Mr. Baden Powell has no justification to say, as he has done, that Northern India owes agriculture to the Dravidians, for there is no evidence to support such a sweeping conclusion.

Baden Powell was, however, correct to a certain extent in coming to the conclusion that the Vaiśya was principally a trader. As we have shown above, he was undoubtedly an agriculturist, but he was a trader likewise. One of his duties in the *Mānava-Dharma-Śāstra* was that he was to understand the excellences and defects of commodities, the advantages and disadvantages of (different) countries, (the probable) profit and loss in merchandise.[1] The taxes levied by the King, so far as merchandise was concerned, was fixed by him, for we find that, "the King was to take one-twentieth of that amount which men, well acquainted with the settlement of tolls and duties and skilful in (estimating the value of) all kinds of merchandise may fix as the value for each saleable

[1] IX. 331.

commodity.[1] As a trader, the Vaiśya had to be careful. The King could confiscate the whole property of a trader who, out of greed exported goods, of which the King had a monopoly (and we may remark that this monopoly[2] continued very late. It will be referred to in the course of my fifth lecture, *the Imperial Mauryas and Economic Development*) or the export of which was forbidden. A trader avoiding a custom-house or a toll, who bought or sold at an improbable time, or who made a false statement in enumerating his goods was fined eight times the amount of duty which he tried to evade. The King was enjoined to fix the rates for the purchase and sale of all marketable goods having duly considered whence they came, whither they went, how long they had been kept and the probable profit and probable outlay. The King was further enjoined to settle publicly, once in five nights or at the close of each fortnight, the prices for the merchants. Further, all weights and measures were to be duly marked, and once in six months he was to re-examine them.[3]

Strict injunctions were in vogue regarding trade, when the Aryans were living on the bank of the Sarasvatí, *e.g.*, we note that "one commodity mixed with another was not to be sold as

[1] VIII. 398.

[2] *Cf.* p. 54.

[3] VIII. 399—403.

pure, nor a bad one as good, nor less than the proper quantity of weight, nor anything that is not at hand or that is concealed."[1]

Every commodity exposed for sale was to be pure.[2] For adulterating and for exposing unadulterated commodities for sale, there was punishment[3] and there was heavier punishment for the trader who behaved dishonestly to honest customers or cheated them.[4] Indeed, those who subsisted by cheating in the sale of various commodities were called "open cheats."[5] That trade had attained a high stage of development is evidenced from the fact that those conducting trade were enjoined to make themselves acquainted with the product and requirements of other countries, with their various dialects, and also with whatever had a direct or indirect reference to purchase or sale.

Not only was there trading on land but also on the river and sea. We note that, "for a long passage, the hire must be proportioned to the places and times; know that this rule refers to passages along the banks of rivers; at sea, there is no settled freight."[6] Further, those who were expert in sea-voyages and able to

[1] VIII. 203.
[2] *Cf.* The Laws of Sale and Purchase, VIII. 222 ff.
[3] IX. 286.
[4] IX. 287.
[5] IX. 257.
[6] VIII. 406.

calculate the profit according to the place, the time, and the objects carried, were to decide in such cases with respect to the payment to be made.[1] Then again, whatever may be damaged in a boat by the fault of the boatmen was to have been made good by the boatmen collectively, each paying his share, if they were culpably negligent on the water; otherwise they were exempted.[2]

The careful way in which tolls at ferries were determined, go to prove the importance paid to these things even in that early age. We are informed that "the toll at a ferry is one paṇa for an empty cart, half a paṇa for a man with a load, quarter for a beast used in agriculture, for a woman, and half a quarter for an unloaded man. Waggons filled with goods packed up, shall be made to pay toll at a ferry according to the value of the goods, empty vessels and men without luggage some trifle. But, he who avoids a custom house of a toll, he who buys or sells at an improper time, or he who makes a false statement in enumerating his goods shall be fined ten times the amount of duty which he tried to evade."[3] Evidently these look like regulations which would do credit to a high stage of civilisation and culture.

[1] VIII. 157.

[2] VIII. 408 and 409.

[3] VIII. 404 and 405.

We have referred incidentally to the taxes levied by the king, and I hope you will permit me to mention a few more duties of the King, which give us ideas as to what the King of the period had to do to increase the material prosperity of his subjects. He had to consider carefully the length of the road, the expense for food and condiments, the charges for securing the goods, and after all these calculations, he had to make the traders pay their duties. He had to tax the duties and taxes in such a manner that both he and the taxing officer received due rewards. He could, indeed, levy annual taxes but this he was to do in the manner of the leech, the calf, and the bee who took their food little by little. Of cattle and gold, he could take a fiftieth part,[1] but so far as lost property was concerned, he could take the sixth, tenth, or twelfth part.[2]

The King could take a portion of flowers, fruits, and pot-herbs—our village Zamindars do take these even now. We are further told that, "he may also take the sixth part of trees, meat, honey, clarified butter, perfumes, medical herbs, substances used for flavoring food, flowers, roots, and fruits."[3] But though, even dying, he could not tax any *śrotriya*,[4] yet he could impose a

[1] VII. 130.
[2] VIII. 34.
[3] VII. 131.
[4] *Ibid*, 133.

trifle of a tax on the common inhabitants who lived by traffic.[1] In times of distress, instead of the one-sixth referred to above, he could take one-fourth.[2] And he was also permitted to take from the people a tax of one-eighth on grain and that of one-twentieth on sums of money down to one *Kārṣāpaṇa.*[3] But, on no account should the tax was to be heavy.[4]

In addition to all these the King had the right to insist on forced labor of mechanics and artisans by compelling them to work for himself one day in each month,[5] while Śūdras, artisans and mechanics were to benefit the King by doing work for him (while others were to pay tax).[6] I have referred to this question about forced labor in my *Notes on the Economic History of Early India*[7] and I do not propose to discuss this again here. A blind man, an idiot, a cripple, a man full seventy years old, could not be compelled by a King to pay tax.[8] Several

[1] VII. 137.

[2] X. 118.

[3] X. 120.

[4] VII. 139. "Let him not cut off his root and (the root of) others through much covetousness; for cutting off his root, he would torment himself and them." *Cf.* in this connection, the lecture on "*Some Economic Teachings of the Mahābhārata.*"

[5] VII. 138.

[6] "Śūdras, handworkers and artisans render (him) assistance by (corporal) labour (only)."

[7] J. B and O. R. S., Vol. VI.

[8] *Cf.* IX. 201.

passages in the *Mānava-Dharma-Śāstra* deserve more than a passing notice. "The King should take away all the property of a man who, through avarice, exports goods of which the King has a monopoly, or which are forbidden to be sold."[1] And again, "once in every five nights or at the close of a fortnight, the King shall settle the prices in the presence of the traders."[2] What do these refer to? Let us read this along with what Yājñavalkya says: "For traders combining to maintain a price to the prejudice of labour and artisans, although knowing the rise or fall of prices, the fine shall be the highest amercement," and again, "For traders combining to obstruct the sale of a commodity by demanding a wrong price, or for selling it, the fine is the highest amercement." But the concluding portion is more interesting: "The sale or purchase should be conducted at the price which is fixed by the King; the surplus made therefrom is understood to be the legal profit of traders." Taking Manu and Yājñavalkya together, it would appear that this "ancient" cornering was for the benefit of the King who evidently could raise prices, and we are not

[1] VIII. 399.

[2] VIII. 402. This may be read along with VIII. 401. "After considering the place of importation and exportation, the storage, the gain, and the loss of all goods bought and sold, let the King establish the price of purchase and sale."

informed whether there was any constitutional limitation to this power.[1]

Summing up, we may say that the King was to obtain revenue from the following six principal sources :—

(*a*) taxes on the produce of land;
(*b*) taxes on the produce of labor;
(*c*) taxes on metals and commodities;
(*d*) taxes on sales and purchases;
(*e*) a poll tax levied from those who lived by travelling;

and (*f*) taxes in kind (paid by labor).

A question which may be incidentally referred to in this connection is, how far the King was the owner of the land or to say in other words, whether the revenue derived by the King was a tax or a rent. Like many other questions of ancient Indian history, opinions differ. A few scholars hold that land always belonged to the Crown, and as such, it was rent which was paid by the farmer to the Crown. Others are not prepared to accept this view and they call the revenue a tax. Appeals have been made to ancient Śāstras

[1] *Mitākṣarā* thus observes: "Although knowing the increase or decrease in the market-rates as regulated by the King, if traders combine and out of greed for profit maintain another price, detrimental to the laborers such as the washerman and others, or the artisans such as painters and sculptors, they shall be fined 1000 paṇas. Moreover, those traders who combining together, obstruct the sale of a commodity arrived from a foreign country, by demanding for it a wrong price, *i.e.*, at a lower value, or sell it at a higher price, the highest amercement according to Manu and others, etc."

as well as to foreign authorities, and though much water has flowed down the Ganges and the Thames as well, much more perhaps would flow before any finality is reached. The testimony of Megasthenes that, "All India is the property of the Crown and no person is permitted to own land,"[1] or that of Diodorus who observed that, "the land in India is the property of the Crown and no private person can own land," has been variously received by scholars. To us it seems that the King was very likely the over-lord, and also the owner, and the title "one owning all the land" is of very great importance.[2]

It would not be altogether out of place to mention in this connexion what Chāṇakya the great writer on Polity observed, that the King was the owner of both land and water, and the people could exercise their right of ownership over all things, excepting those two.[3] The testimony of Mr. Vincent Smith who combined in himself the duties of a historian and a government-officer that," the native law of India

[1] Fragment XXXV.

[2] The brilliant and learned Indologist, Mr. K. P. Jayaswal, is very much against this theory. In *Modern Review*, Vol. xiv, he attacks those English writers who "confidently asserted that property in the soil always vested in the Hindu sovereign." With Mr. Jayaswal, "this is as great an error as to describe the Baltic as a desert in Mongolia." He relies on the Law Books, Inscriptions and above all on the *Mimamsa* and pointedly draws our attention to the discussion of this subject in Colebrooke's Essay.

[3] Book II, Chapter 24.

has always recognized agricultural land as being Crown property, and admitted the undoubted right of the ruling power to levy a Crown rent, or land revenue, amounting to a considerable portion, either of the gross produce or of its cash value" is the view which ought to receive due consideration. Kauṭilya has also used the expression "private lands"[1] which go to show that people other than the King had proprietary right in some lands. But then we have to remember that the ancient Indian King could give away lands just as the Anglo-Saxon Kings could and did and so the expressions seem to me to be reconcileable.

Lending was in existence and in fact was an approved line of business, though occasionally it was condemned.[2] There were seven modes of acquiring wealth,[3] *viz.*, inheritance, receiving, *i.e.*, to take a gift from a friend or depositor, purchasing, conquering, earning by lending money or by labor and also receiving (presents) from

[1] II. 24. It may be added here, what the Commentary on the *Arthaśāstra* says, "Those who are well-versed in the Śāstras admit that the King is the owner of both land and water, all that the people can exercise their right of ownership over all other things, excepting these two."

[2] IV. 210, where a Brāhmaṇa was not to take food of an usurer. Vaśiṣtha also says, "A Brāhmaṇa and a Kṣatriya shall not lend anything at interest."

[3] Medhatithi explains that the first three were for all the castes, the fourth for the Kṣatriya, the two next for the Vaiśya and the last for the Brāhmaṇa.

the good.[1] There were ten means of supporting life, *viz.*, science,[2] art, working for hire, (servile) attendance, cattle-tending, trades, agriculture, determination,[3] begging, and usury.[4] We understand from the commentator that in times of need, all these acts could be performed.

Excessive interest, however, was not allowed. Five per cent. a month was the very highest interest.[5] Interest on money, if paid all at once and at the same time as the debt, was not to be more than enough to double the principal; and the sum of the interest and principal should not be more than five times the principal, when this interest was paid on corn, fruit, wool or draught animals.[6] Renewal of the principal was allowed.[7]

It is surmised that, "greater honor is given to occupations which could be carried on within sanctified precincts, and therefore lending money at interest is one of the respectable means of acquiring property."[8] Whatever the reason may be, we find the following regulations regarding a debtor and creditor: "When a debtor has

[1] X. 115.

[2] No explanation of this has been given, but learning Vedic knowledge is perhaps meant.

[3] Kulluka explains it as "contentment, for where this exists life is supported by even a little."

[4] X. 116.

[5] VIII. 142 and 152.

[6] VIII. 151.

[7] VIII. 155.

[8] Mrs. Manning: *Ancient and Mediæval India.*

acknowledged (in court) that a debt is really due, he deserves a fine of five in the hundred; if he has denied the debt (he should be fined) twice as much. A money-lender to increase his capital, may take the interest declared legal by Vaśiṣṭha, namely, an eightieth part of one hundred a month. Or reflecting on the duty of good men, he may take two per cent. for even taking two per cent. a month, he does not become a wrongdoer for gain. He may take a monthly interest of two per cent., three per cent., four per cent., five per cent. according to the order of the castes."[1]

Excessive interest other than the regular rate was not lawful, this being known as usury; the lender could take five per cent.[2] (which according to verse 140-142 five per cent. a month,) which was the very highest interest he was permitted to take—a rate which is here made legal apparently for all castes, though by verse 142, it was confined to a Śūdra. Interest over a year was not permitted, nor interest unrecognized by law. Wheel interest,[3] periodical interest, stipulated interest and corporal interest were also prohibited.[4]

There were definite regulations regarding the renewal of the debt, for we find that if anybody

[1] VIII. 139-142.
[2] VIII. 152.
[3] Compound interest ?
[4] VIII.153.

was unable to pay a debt and was desirous of renewing the obligation, he had to cause the proof [1] to be repeated, but the interest had to be paid. In case he failed to repay the interest at the time of renewing, he had to cause the agreement in regard to the principal to be renewed, and at the same time he had to promise a sum equal to the accumulated interest. It is however to be noted that though interest was allowed, usury was evidently looked down upon, for we note that an usurer was excluded from Śrāddhas,[2] and not only was the food offered by the usurer forbidden to the gods [3]—but also to the Brāhmaṇas.[4] It appears that pledges were also in existence in those times. We are told that forced pledges were ineffective, as they did not only lead to the relinquishment of interest but compensation had also to be paid. Further, no pledge or deposit was lost through lapse of time; both could be taken back although kept even for a long time.[5] There were also regulations regarding witnesses who failed to give testimony when summoned in suits for debt. The witness had to incur the whole of the debt and a tenth of the whole sum as fine, if he failed to attend.[6]

[1] Kāraṇam—evidently an instrument or document.
[2] III. 153.
[3] IV. 210-220.
[4] IV. 224.
[5] VIII. 144 ff.
[6] VIII. 107

Likewise, there were clear rules regarding wages. A hired servant or workman, who without being ill, and out of pride failed to perform his work according to the agreement was to be fined in addition to his losing the wages. If he was ill but after recovery he performed the works, he was to receive the same. But the work had to be done according to the agreement.[1] Then, there were laws regarding agreement. There were rigid rules with respect to agreements made by a man belonging to a corporation. There was a similar law regarding those who violated agreement in villages and castes.[2] Sales, also, were regulated according to the laws. A man repenting of his bargain could return or take back the chattel within 10 days, but after this, it could be taken back only by mutual consent.[3] All these clearly show that society had attained a high stage of culture, or they would not have required all these definite rules.

Coins[4] also were in full existence and we get clear mention of them. The technical names

[1] VIII. 215-218.

[2] VIII. 220-221.

[3] VIII. 222 and 223.

[4] Referring to coins, Craufurd, *Researches concerning the Laws, Theology, Learning, Commerce, etc., of Ancient and Modern India* observes,—" Previously to obtaining a knowledge of those laws and other ancient Hindu writings, the remotest mention that we had of money, was in the Scriptures, but if we admit the laws of Manu to have existed at the dates generally allowed to them, and when various circumstances tend to show that they were in use, we shall

of certain quantities of copper, silver, and gold which were generally used for the purpose of business, evidently refer to coins. The method of describing them is something unique. "The very small mote which is seen when the sun shines through a lattice, they declare to be the least of all quantities and to be called a *trasareṇu* (a floating particle of dust). Eight *trasareṇus* are considered in respect to weight (as equal to) one egg of a louse; three of these (are equal to) one grain of black mustard; three of these (are equal to) one grain of white mustard. Six grains of (white) mustard (are equal to) a medium-sized barley-corn; three barley-corns (are equal to) one *Kṛṣṇala*; five *Kṛṣṇala* constitute in (weight) a bean (*māṣa*); sixteen *māsa* (are equal to) a gold-piece (*Suvarṇa*). Four *Suvarṇa* (are equal to) a *pala*; ten *pala* to a *dharaṇa*; two *Kṛṣṇala* of the same weight should be regarded as a silver *maṣakā*. A *dharaṇa* or silver *purāṇa* would be sixteen of these; a copper *paṇa* weighing the same as a *karṣa* should be known

find that not only the precious metals were employed as a medium of purchase, many centuries before their being first spoken of in that light in Jewish history, but that maritime commerce also was then practised in India. It seems to be almost universally allowed, that the knowledge of arts and sciences originated in, or was brought from India into more western nations; admitting this, we must allow time for their progress and consequently conclude that the Hindus practised them before the Hebrews." This opinion, is, of course, debateable.

as a *Kārṣapaṇa.* Ten (silver) *dharaṇa* make a silver *śatamāna*; a weight of four *suvarṇa* is called a *niṣka*."

Dr. Thomas with reference to the above classification has very rightly observed, "In the table quoted by Manu, the classification

[1] VIII. 131-137.

Burnell's Edition of *The Ordinances of Manu* gives the following footnote. "The *Kṛṣṇala* was practically the smallest weight used; it was also termed a *raktikā*, and its weight was 0 122 grammes. The fines in court were reckoned as so many *paṇas*, one *paṇa* being the same as a *karṣa* = 16 *māṣa* = 80 *kṛṣṇala*. Some of the weights mentioned are confined to gold—*suvarṇa* and *niṣka*; some to silver—*purāṇa* and *śatamāna*; and some are used of both—*kṛṣṇala*, *paṇa*, *māṣa* (māṣaka), *pala*, *dharaṇa*; the last at times of copper)." (P. 200.)

The following two tables will illustrate Manu's idea :

TABLE No. I.

Silver.

2 Rati	= 1 Māṣaka.	
32 ,,	= 16 ,,	= 1 Dharaṇa or Purāṇa.
320 ,,	= 160 ,,	= 10 Dharaṇa = 1 Śatamāna.

Gold.

5 Rati	= 1 Māṣa.	
80 ,,	= 16 ,,	= 1 Suvarṇa.
320 ,,	= 64 ,,	= 4 ,,
		= 1 Pala or Niṣka.
1200 ,,	= 640 ,,	= 40 Suvarṇa = 10 Pala = 1 Dharaṇa.

Copper.

80 Rati = 1 Kārṣāpaṇa.

TABLE No. II.

8 Trasareṇu	= 1 Likhya or Likṣya.		
24 Trasareṇu	= 3 ,,	= 1 Rājasarṣapa.	
72 ,,	= 9 ,,	= 3 ,,	
		= 1 Gaurasarṣapa.	
432 ,,	= 54 ,,	= 18 ,,	= 6 ,,
			= 1 yava.
1296 ,,	= 162 ,,	= 54 Rajasarṣapa.	
		= 18 Gaurasarṣapa.	
		= 3 yava.	
		= 1 Kṛṣṇala or Rati.	

represents something more than a mere theoretical enunciation of weights and values, and demonstrates a practical acceptance of a pre-existing order of things, precisely as the general tenor of the text exhibits of these weights of metal in full and free employment for the settlement of the ordinary dealings of men, in parallel currency with the copper pieces, whose mention, however, is necessarily more frequent both as the standard and as the money of detail, amid a poor country."[1]

With regard to the internal administration of the country on the bank of the Sarasvatī, it may appear that it was divided into divisions governed by Governors or Viceroys, to whom the king delegated his authority. This authority in its turn was delegated to other subordinate governors and so forth, so that the highest ruler governed over a thousand towns, the next over hundred, the next over twenty, the next over ten, and the lowest over one town. "Let the king appoint a lord over (each) village as well as lords of ten villages, lords of twenty, lords of a hundred, and lords of a thousand." The lord of one village was to inform the lord of ten villages of the crimes committed in his village and the ruler of ten to make his report to the ruler of twenty. But the ruler of ten was

[1] *Numismata Orientalia* I. 36.

shall report all such (matters) to the lord of a hundred, and the lord of hundred shall himself give information to the lord of a thousand."[1] The revenue of these were arranged as follows: "The ruler of ten (villages) shall enjoy one kula (as much land as suffices for one family), the ruler of twenty-five kulas, the superintendent of a hundred villages (the revenues of) one village, the lord of a thousand (the revenues of) a town.[2] And over all these was a minister whose duty it was to inspect and report to the King[3] and there was also a superintendent of all affairs who was to visit personally by turns all those officers.[4]

The disputes relating to the boundaries of villages were settled by the King in the month of *Jyaiṣṭha* when the land-marks were most distinctly visible. There are specific directions regarding the boundaries of trees. To prevent disputes, the king was to mark the boundaries by trees, by clustering shrubs, bamboos of different

Rapson in his *Indian Coins* (p. 2) has also observed, "the most ancient coinage of India, which seems to have been developed independently of any foreign influence, follows the native system of weights as given in Manu." I am sorry when these lectures were delivered, Prof. Bhandarkar's *Lectures on Numismatics* had not been published to enable me to derive help from his valuable researches.

[1] VII. 115-117.

[2] VII. 119.

[3] VII. 120.

[4] 4. VII. 121

kinds, raised mounds, etc.[1] Tanks, wells, cisterns, and fountains were to be built where boundaries met as well as temples.[2] There were also hidden marks such as stones, bones, cow's hair[3] and whatever other things of a similar kind which did not corrode even after a long time.[4] In cases of doubt, witnesses were to be summoned and questioned, and they were to give their unanimous opinion.[5]

A question of importance has been raised regarding the village-communities, with which these villages of Manu were concerned. Village communities are still in existence and some of them deserve the high praise bestowed on their ancestors. But I think it unnecessary to take up this question, and specially at this stage, as my friend Prof. Radhakamal Mookerje's learned book on this very important subject is shortly to be published.[6]

[1] VIII. 121 & 122.
[2] VIII. 246 & 247.
[3] VIII. 248.
[4] VIII. 250.
[5] VIII. 253.
[6] This has now been published.

LECTURE III

THE RĀMĀYAṆA FROM THE ECONOMIC POINT

In my next lecture on "*Some Economic Teachings of the Mahābhārata*," I have tried to draw a picture of the economic condition of ancient India as revealed in the great Epic. I propose to draw up here a short picture of the economic culture as portrayed in the Sister-Epic, the *Rāmāyaṇa* of *Vālmīki*. It is not necessary for me, here, to discuss any question relating to the age of this Epic; neither do I think it expedient to take up the question how much of this national poem pervading with the same spirit as the *Mahābhārata*, was the production of only one man or whether it is simply "an artificial epic,"[1] though it has been admitted to be "homogeneous in plan and execution."[2] But, whatever may be the divergence in view regarding such questions, no difference has arisen regarding its great popularity even down to the present day. Neither has its historical value, as the first "Literary record of the passing of the Aryans beyond the Vindhya mountains, the southern boundary of *Āryāvarta* and their

[1] *Macdonell : A History of Sanskrit Literature*, p. 281.

[2] *Ibid.*

penetration by armed force into Southern India,"[1] been questioned.

I have to-day taken up the book as it is now presented to the civilized world, (though I have avoided, as a rule, references to the *Bāla Kāṇḍam* which is considered to be spurious,) gleaning what materials I have found regarding economic culture as depicted in it. At the outset, however, I must frankly confess that the materials at our disposal are not so abundant as I have been able to glean from the *Mahābhārata* and that the economic culture of the *Rāmāyaṇa* period seems to be more primitive than what we find in the other. This is in perfect keeping with what Dr. Macdonell observed, when he said, that, "the original part of the *Rāmāyaṇa* appears to have been completed at a time when the epic kernel of the *Mahābhārata* had not as yet assumed definite shape."[2] True it is that even here, wealth signified not merely coins,[3] but it consisted of horses, elephants, woolen sheets, and deer skins as well,[4] just as we find in the *Mahābhārata*,[5] where paddy and oats, gems and beasts were included along with horses, elephants, kine, and gold as wealth,[6] showing

[1] Havell: *Aryan Rule in India.*

[2] Macdonell: *A History of Sanskrit Literature*, p. 306.

[3] *Bāla* V & *Ayodhyā* C. [4] *Ayodhyā* LXX.

[5] Compare *Mahābhārata, Sabhā Parvan*, gambling scenes: Also *Ādi*, LXXXV.

[6] Manufactures and produce of the land were also included.

that even in those early days *Artha* had to a certain extent the same sort of meaning that wealth means in modern-day economic phraseology. Kine, even then, was very likely the medium of exchange,[1] signifying certainly a primitive stage of society. The price of a particular cow is also mentioned in terms of kine.[2] Indeed, in almost all the passages which I have been able to collect, though silver and gold [3] are mentioned and I take it that these are generally silver and gold coins,[4] importance has been invariably given to kine. King Daśaratha does give gold and silver but he does it along with ten lacs of kine.[5] When the King gives away the four quarters of the world to the sacrificial priests, they wanted as price thereof gems or gold but preferably kine. The King is indeed spoken of as dispensing with *dakshiṇās* profusely but he does it along with hundreds and thousands of kine."[6] His daughter-in-law, the inimitable Sītā also evidently attached more importance to kine than to gold or silver, for in addressing the Ganges [7] as well as the

[1] *Bāla*. LIII. Subsequent references will show that they were referred to in some other *Kāṇḍas* as well.

[2] *Ibid. cf.* J.R.A.S., 1901. P. 876, where Mrs. Rhys Davids speaks of reckoning values of things by cows.

[3] *Bāla*, XIV. *Ayodhyā*, LXX.

[4] Prof. Bhandarkar considers the references in the *Bālakāṇḍam* to be very likely *Dīnāras*, evidently on the ground that this *Kāṇḍa* was of later day.

[5] *Ibid.* [6] *Ibid.* Also *Kiṣkindhyā*, V. [7] *Ayodhyā*, LII.

Kālindī,[1] to propitiate them, she promises to offer thousands of kine. Certainly if she had liked and if gold and silver had been the general media of exchange, she would not have laid particular importance to the kine. We are told again that the banks of the *Gomatī* were filled with kine.[2] When Rāma was giving away his wealth, he rewarded the Brāhmaṇa Trijaṭā with cows and bullocks,[3] though we find him giving away golden coins[4] as well. We also meet with the celebrated *Niṣkas*[5] which figure prominently from the Vedic age. We see King Kaikeya giving two thousand *Niṣkas* to Bharata. Certainly these *Niṣkas* were coins and to these may be very well applied the oft-quoted remarks of the venerable authors of the *Vedic Index* that these could hardly be required for purposes of personal adornment.[6]

As in the *Mahābhārata*, so here also we find, *Dharma*, *Artha*, and *Kāma* are enjoined to be enjoyed equally.[7] Rāma asked Bharata whether he was doing so, just as we find in the sister epic Yudhiṣṭhira being questioned repeatedly on the same topic. We also find Kumbhakarṇa admonishing Rāvaṇa and telling him that as the

[1] *Ibid*, LV. [2] *Ayodhyā*, XLIX.
[3] *Ayodhyā*, XXXII. [4] *Ibid*. [5] *Bāla*, VI. *Ayodhyā*, LXX. *Cf. ante* 33ff.

[6] *Vedic Index*, Vol. I, p 455. Prof. Bhandarkar's *Carmichael Lectures*, 1921, p. 64, may also be profitably referred to in this connection. [7] *Ayodhyā*, C.

king had not pursued seasonably these three things he was to come by calamity.[1] But while in the *Mahābhārata* the King was asked whether in the last division of the night he reflected both over *Dharma* and *Artha*,[2] here we find Rāma enquiring of Bharata whether the latter resolved on the means of acquiring wealth only, during the short hours of the night.' But inspite of this, the advice of Kumbhakarṇa that a king who pursued seasonably righteousness or profit or desire or any two or all these combined truly had understanding, is indeed insignificant and reflects the spirit of the time showing that it was becoming more materialistic which we find practically fully developed in the *Mahābhārata.*

After having made some general remarks we pass on to make some observations on some particular topics.

The first point which we take up first is the question of agriculture, the main industry of the people from the Aryan-settlement down to the present age. As usual, importance is attached to this matter, here also. The King of the *Rāmāyaṇa*, like the King of the *Mahābhārata*,[3] was required to understand three kinds of learning, namely, Vedas, Agriculture, and Commerce. And the question asked of Bharata by Rāma, whether the agriculturists and the cowherds

[1] *Lankākāṇḍam*, 63.

[2] *Sabhā*, V, 85, 86. Also *Ādi*, CCXXIV.

[3] II. 5.

found favor in Bharata's sight is not only significant but certainly reminds one of the question which was asked of Yudhiṣṭhira by the great saint Nārada.[1] The cultivators and cowherds[2] were to enjoy happiness and the king was to secure unto them, what they wished for and remove from them what they did not like. Ayodhyā is represented as full of cultivators,[3] abounding in paddy and rice, the staple crops of those days[4] as well as of these. The King is represented as boasting of his kingdom as abounding in corn.[5] Villages are described as having ploughed-fields on their skirts.[6]

Not only the capital but the kingdom of *Kośala* as a whole abounded with corn,[7] while the King of *Mithilā* is described as engaged in ploughing[8] and finding out Sītā, showing significantly the importance of agriculture.[9] A Brāhmana is seen earning his livelihood by digging the earth with spades and ploughs[10] and evidently no stigma is attached to his action, though with the advance of the society, as in the *Mahābhārata* we note how a Brāhmana's taking to agriculture was condemned[11]—a fact which also seems to prove that the society

[1] *Sabhā*. [2] *Ibid*. [3] *Ayodhyā*, LXVIII.
[4] *Bāla*, 5. [5] *Ayodhyā*, III 14. [6] *Ibid*. XLII.
[7] *Ayodhyā*, LXXV. [8] *Bāla*, LXVI.
[9] *Cf*. R. C. Dutt: *A History of Civilization in Ancient India*, p. 39
[11] Compare *Mahābhārata*, *Sabhā*, XII. 91. [10] *Ayodhyā*, XXXIII.

described in the *Rāmāyaṇa* was more primitive than that described in the *Mahābhārata*.

Famines seemed to be in evidence, though we are told that during the reign of Rāma, the people were to be free from the fear of famine.[1] The fact, however, that the king was to have a clear idea regarding the prevention of famine shows that famines were not unknown even in those days.[2] We are also informed that drought overtook the neighbouring kingdom of the king Romapada. The reason why this took place is significant from the view of political philosophy,[3] the evil referred to coming in consequence of some default on the part of the king—a point which we propose to take up later on.

The age had made sufficient progress so far as the arts were concerned. The artisans enjoyed special privileges and it is on record in the *Rāmāyaṇa* that some of the higher craftsmen, specially those engaged in the canons of the rituals, the *Śilpaśāstras*, enjoyed a very high social status. Similarly those employed in irrigation works and in the preparation of public buildings enjoyed high privileges. Ayodhyā was inhabited by all classes of them[4] and they had to be specially entertained.[5] They seemed to have been specially protected and just as we

[1] *Bāla*, I. [2] *Ayodhyā*, C. [3] *Bāla*, IX. [4] *Bāla*, V. [5] *Ibid*, XIII.

find in the *Mahābhārata*,[1] and as advocated by Kauṭilya,[2] forts were required to be provided with them.[3] In the interesting list of trades, which we get in the *Rāmāyaṇa*,[4] we find mention of various classes of artisans along with various other traders who evidently contributed to the welfare of the capital and the king, as well as of the people, along with others who helped in the formation and development of the economic life of the people. The list is a long one reminding us of the suggestive one put forward by Ajataśatru, the king of Magadha, when he made his only call upon the Buddha, but is worth noting. The list is mentioned when the traders formed themselves into a body and went out of Ayodhyā to meet the Prince, and is as follows :—

A good number of jewellers, expert and agreeable pot-makers, persons skilled in machinery and the use of weapons ; a band of fowlers, piercers of objects, dentists, extractors of wine, perfume-dealers ; renowned goldsmiths, physicians, wine-keepers, incense-worshippers, washermen, weavers, painters, charioteers, bards, eulogists, peasants, makers of ramparts, makers of instruments, artisans, dealers in bellmetal vessels, cultivators, shop-keepers, fruitsellers, garland-makers, planters, experts in brick works,

[1] *Sabhā*, V. 35. [2] *Arthaśāstra*. [3] *Ayodhyā*, C.
[4] II. 90.

curd-keepers and vendors, sellers of meat, dealers in lime, badge-makers, cotton-sellers, bow-makers, thread-sellers, experts in the manifold use of weapons, shoe-makers, blacksmiths, makers of iron bars and bows, skilful chemists, knowers of past, present and future; brass and copper dealers, barbers, and actors. We cannot say definitely whether these constituted the guilds of those days, although it seems probable they may have formed so. The guilds are casually referred[1] to, though, as usual, unfortunately, their distinct names are not mentioned.

Some references which I have been able to collect give us a clear indication of the advance made in the various arts. Shafts were decked with gold,[2] and occasionally feathered shafts were also plated with gold,[3] while instances of bows decked with gold were also not rare.[4] Coats of mail,[5] gold-hilted scimitars,[6] and golden armours,[7] show the progress made by the artisans in the process of manufacturing armours.

Not only the arts connected with war but in domestic utensils also, progress could be noticed. Gold, silver and bellmetal vessels[8] were in use, while vessels made of burnished gold with

[1] *Ayodhyā*, LXVII. [2] *Kiṣkindhyā*, VIII.
[3] *Āraṇyaka*, III, XXI & XL. [4] *Sundara*, XLVII
[5] *Ayodhyā*, XL. [6] *Āraṇyaka*, XLIV. [7] *Ibid.*
[8] *Kiṣkindhyā*, L & *Bāla*, LXXIII.

silver covers,[1] show not only the wealth and luxury of the age but prove also the development of the art. Bangles studded with gems,[2] elegant ornaments,[3] garlands of well-melted gold,[4] and pen dants of pure gold,[5] typify the improvement in the craft of the goldsmiths referred to in the long list of trades, while cars decked in gold were also not wanting.[6]

And finally, the description of the palace of Rāvaṇa ornamented with plastered jewelled pavements studded with all gems, crystals and pearls, with elephants of burnished gold and speckless white silver, girt round by a mighty golden wall, furnished with golden doors, with beautiful golden stairs embellished with ornaments of burnished gold, with lofty edifices having excellent windows made of ivory and silver, covered with golden nets show how the art of the artisan had progressed and reminds one of the palace of the "City of the Fairest" near Cordova displaying the wealth and the taste of the Khālifs of Spain of a very late age. Well might Hanumān acclaim at the sight of the bedchamber of the Ceylonese king, with its jewelleds taircase, illumined with heaps of gems, its terracesof crystal and statues of ivory, pearls, diamonds, coral, silver and gold, adorned with

[1] *Bāla*, XVI. [2] *Āraṇyaka*, LII. [3] *Ibid.* LIV.
[4] *Ayodhādyā*, IX. [5] *Āraṇyaka*, LI. [6] *Ibid.* XLIX.

jewelled pillars, that this must be *Swarga*, or the abode of the immortals.[1]

But if progress had been made in the arts, greater advancement had undoubtedly been made in the art of textile industries. Silk dress was very much in demand, and figured prominently. This would be evident from some of the instances quoted below. Sītā when going to Daṇḍaka wore silk [2] and even when in Daṇḍaka she appeared in silk. Surrounded and oppressed by *cheṭis*, suffering from the pangs of separation from her dear lord we are surprised to find her clad in silk.[3] Rāvaṇa came to her while she was in the forest clad in silk,[4] and in describing her he spoke of Sītā as being dressed in silk.

Indeed, silk dress seems to have been much in vogue. On the occasion of the marriage of Sītā, Janaka gave among other presents a large quantity of silk dress.[5] The queens of Daśaratha were clothed in silk when they welcomed Sītā as a bride,[6] while we find Rāma and Sītā clad in silk at home [7] and even an ordinary nurse is seen clad in silk dress.[8] Bharata put on a dress of silk when he went out of the Capital to meet Rāma in the forest.[9] We have already mentioned the fact of Rāvana's going to Sītā clad in silk; we further find him

[1] *Sundara*, IX. [2] *Ayodhyā*, VI, XX, XXXII, LXV.
[3] *Āraṇyaka*, LXVI. [4] *Ibid.* [5] *Bāla*, LXXIV.
[6] *Bāla*, LXXVII. [7] *Ayodhyā*, XXXVII and also LXXIX.
[8] *Ayodhyā*, VII. [9] *Ayodhyā*, LXXXIX.

sleeping with a dress of yellowish silk,[1] while after his death he was decked in silk before cremation.[2] Other materials were also in evidence. Common cloth was of course in use,[3] along with ordinary linen garments,[4] as well as silver and golden robes,[5] excellent yellow cloth made of golden fibres,[6] while coverlets studded with jewels,[7] were also not rare.

Shepherds were particularly mentioned as residing in the Capital.[8] Woollen stuffs were in evidence both in Ayodhyā,[9] as well as in Kiṣkindhyā.[10] Woollen sheets were also used,[11] along with wollen carpets made of the fleece of the deer,[12] while covered blankets were in evidence as well.[13] Spacious and parti-colored woollen cloth figured in the bed-room of Rāvaṇa,[14] and other evidences were also not wanting in to show the development of textile industry.

Commerce indicates not only the progress which a nation or a country makes but also the connection which it has with the other countries or nations of the world. As I have already observed, the king of the *Rāmāyaṇa* is enjoined to learn three kinds of learning, namely Vedas, agriculture and commerce. That indicates the importance which was attached to commerce though the list of countries having commercial

[1] *Sundara*, X. [2] *Ibid* CXIII. [3] *Kiṣkindhyā*. [4] *Ayodhyā*.
[5] *Sundara*. [6] *Ibid* [7] *Ibid*. [8] *Ayodhyā*, LXVII.
[9] *Bāla*, LXXIII. [10] *Kiṣkindhyā*, L. [11] *Ayodhyā*, LXX.
[12] *Ibid*. [13] *Ayodhyā*, XXX. [14] *Sundara*, IX.

relations with Ayodhyā does not appear to be very long. Traders however did come from other lands with various kinds of merchandise to Ayodhyā,[1] which was also inhabited by merchants of various other lands.[2] We also note that opulent traders graced the army of the prince,[3] when Rāma was proceeding towards the forest, but the want of details is due possibly to the fact that the king of Ayodhyā possessed only a small territory. Instances are not rare of persons voyaging across the sea,[4] or of merchants trafficking beyond the sea to bring presents to the king.[5] Here we note, of course, some paucity of details, specially in comparison with the very long list which we find in the *Sabhā Parva* of the *Mahābhārata*. That even an inland-king like Guhaka could command hundreds of *Kaivarta* young men to lie in wait to obstruct the enemy's passage with five hundred ships which though fit for a naval fight were very likely employed for trading purposes as well, shows the trading propensity of the people of those days. The directions given by Sugrīva, the monkey-leader for the search of Sītā, mentioning various places where Rāvaṇa could have concealed her, are significant as indicating the names of places which were then known to the people of southern India

[1] *Ayodhyā*, LXVI. [2] *Bāla*, V. [3] *Ayodhyā*, XXXVI.
[4] *Ayodhyā*, LXXII. [5] *Ibid.*

and which probably had commercial transaction with that portion of the continent. The leaders of monkeys were urged to go to the cities and mountains in lands beyond the sea,[1] showing that they had maritime and probably commercial dealings with these places. They were also ordered to go to the land of the *Kośakāras*,[2] about which attempts have been made to identify it with China, and which is said to have first produced silk worms. The *Yavana Dwīpa*, whatever it may refer to (we have no indication that this reference is spurious) and *Suvarna Dwīpa* which has been identified with Javā and Sumatrā were not excluded. Mention is also made of *Lohita-Sāgara* which probably referred to the Red Sea of the modern day and might probably refer also to the Erythrean Sea of the ancients. Making all allowance, we may come to the conclusion that commerce had attained a high degree of development.

My brief and incomplete references to questions relating to economic culture would be still more incomplete if I do not refer to the important question relating to the economic connection between the king and his subjects, a subject which I have dealt with at large in my next lecture, "*Economic Teachings of the Mahābhārata.*" I can here refer briefly to some of the

[1] *Kiṣkindhyā*, XL. [2] *Ibid.*

statements in the *Rāmāyaṇa* concerning this important question.

Great importance has been attached by Prof. Hopkins in his *Position of the Ruling Caste*,[1] to the passage of the Rāmāyaṇa in the *Ayodhyā Kāṇḍam*, "Are thy incomings great and outgoings slender?"[2] He has considered this passage along with other passages in the *Mahābhārata* and has observed, "The possibility of the kingdom's existing without taxation seems specially to irritate the compilers of the epic. They revert to the subject again and again and prove that the king must have wealth, his army, his happiness, his virtue depend on it. As a robe conceals a woman's nakedness, so does wealth conceal sin; therefore let him get wealth even if he be so sinful." And he goes on to explain the twelfth book and says that it means that "let the king tax the people they rule as much as they can; for poverty is a crime."

It is unfortunate that much misconception exists regarding matters relating to ancient India. Commentators take up detached passage and, I may venture to add, come to conclusions. Prof. Hopkins has himself admitted that in the epic, all taxation more than legal was decried. We find that the king was to impose taxes gradually and with mildness.

[1] J. A. O. S., Vol. XIII. [2] Chap. C.

We see how Rāma was told that "the sin of that monarch is mighty that taketh a sixth part of the subjects' incomes but doth not protect them as sons."[1] We also find that the king that protected his subjects righteously was entitled to a fourth part of the great religious merit reaped by an ascetic,[2] an injunction which was practically repeated in the *Uttarakāṇḍam* that a king who ruled well, enjoyed the sixth part of the merits of his subjects.[3] And therefore it follows that the king who failed to rule well did not enjoy the merits of his subjects.

The idea was that by exacting taxes from the subjects but failing to do his duty, the king was robbed of his merits and all sins of his subjects devolved on him. That was a very important consideration in those days when very great importance was paid to rules of religion which decided all important questions.

[1] *Āraṇyaka*, VI. *Vide ante*, p. 73.

[2] *Ibid*, LVII.

[3] *Uttara*, LXXIV.

LECTURE IV

SOME ECONOMIC TEACHINGS OF THE MAHĀBHĀRATA

There is an oft-quoted Bengalee saying, "যা নেই ভারতে, তা নেই ভারতে." It means simply that what is not mentioned in the "Bhārata," *i.e.*, the *Mahābhārata* cannot be found in "Bhārata," *i.e.*, *Bhāratvarṣa* or India.[1] The saying is true in more than one sense. We have two national works, the *Rāmāyaṇa* and the *Mahābhārata*. "In the huge conglomeration of stirring adventure, legend, myth, history and superstition which goes to make up the great epic there is contained a far truer picture of the vulgar custom, belief, and religion of the time than the too polished composition of Vālmīki is able to afford, despite the fact that the latter also has many popular elements welded into it."[2]

[1] "The very encyclopædic character of the work, the perfect combination of the tale and the teaching it offers in good abundance, the life of contemplative action, devotion and goodness it inculcates, the optimistic outlook on life it unconsciously enjoins on its readers, all have tended to foster into the mind of every Hindu a deep veneration for their ancient monument."

[2] Hopkins : *Religions of India*, p. 349. *Cf.* also "In its maxims of polity, in its outlook on life, in its ethics, in its religious systems, in its immediate relation to the necessities of human conduct—in short, in its direct connection with the toiling— work-a-day life of ours, the *Mahābhārata* stands nearer to us than perhaps the Veda."

I do not want to enter into the much-debated question of the age of this great national epic. It is indeed very difficult to ascertain when the *Mahābhārata* was commenced, though it may be a fact that it was completed some centuries before the death of Christ.[1] But it is, of course, also a fact that a considerable amount of time must have elapsed since the Aryans had first settled in India. "The Kurus, and Pānchālas were no longer like the warrior-cultivators who battled against the black aboriginies and won the banks of the Indus and its tributaries. Manners had changed, society had become more refined and polished, learning and arts had made considerable progress. Kings invited wise men to their courts, held learned controversies with their priests, performed elaborate sacrifices according to the rules of the age, led respectable and trained armies to the field, appointed duly-qualified men to collect taxes and administer justice and perform all the duties of civilised administrators. The relations and friends of the King and all the warriors of the nation learnt archery and the driving of the war-chariot from their early

[1] "Jacobi seeks to put the completed nucleus at the time of the Christian era, but it must have been quite a large nucleus, in view of the allusions to it in precedent literature. Holtzmann puts the completion at about 1000 A.D.; but in 700 A.D., it was complete and most scholars will agree with Bühler that the present *Mahābhārata* was completed by the 6th or 7th century." Hopkins : *The Religions in India*,

youth and also learned the Vedas and all the holy learning that was handed down from generation to generation. The priests multiplied religious rites and observances, preserved the traditional learning of the land, and instructed and helped the people in their religious duties. And the people lived in their towns and villages, cherished the sacred sacrificial fire in their houses, cultivated arts of peace, trained their boys from early youth in the Vedas and in their social and religious duties and gradually developed those social customs which in India have the force of laws."[1] It will be our endeavour to place before you some facts realating to the economic life of this people so well described above, and bearing on ancient Indian culture.

First of all, I should like to suggest that the world of the *Mahābhārata* had become, so to say, more materialistic than before, for, we do not find so great an importance attached to *Artha* (wealth). previously *Dharma* and *Artha* have been placed side by side as almost of equal importance. Yudhisṭhira was again and again asked by

p 350. " Macdonell is disposed to agree that the historical germ of the *Mahābhārata* cannot well be later than the 10th century B.C., and this date is all the more significant, since the downward limit set down by the same scholar for the Vedic period is 1300 or 1500 B.C. It cannot be denied that it had its root reaching much further back into Indian antiquity than its presumed date and was also the source and inspiration of much that was admired in the later phase of Indian civilization and literature." (Reference mislaid).

[1] R. C. Dutt: *A History of Civilisation in Ancient India.*

Nārada whether he pondered ever *Artha* (along with *Dharma*). The King is asked whether in the last division of the night he reflected over *Dharma* and *Artha*.[1] Enquiry is made as to whether the eldest Pāṇḍava daily listened to words fraught with *Dharma* and *Artha*, whether he paid attention to the words of old men learned in the science of *Artha* and capable of pointing out the ways of both *Dharma* and *Artha*.[2] He was told that wealth was effective when its possessor enjoyed it himself and gave it away in charity.[3] Elsewhere in the *Śānti Parva*, the King is considered the root of the three-fold object of human existence, *viz.*, virtue, wealth, and pleasure. Nārada further enquired whether the wealth acquired by the king was spent on proper objects,[4] and though 'proper' objects' included evidently the presentation of *ghee* and honey to the Brāhmaṇas for the increase of crops, kine, fruits and flowers,[5] the very question whether the expenses of the king were covered by a half, a third, or a fourth part of his income shows the importance of

[1] *Sabhā* : V. 85-86. *Cf.* also *Ādi* CCXXIV, where Yudhiṣṭhira is mentioned as serving equally *Dharma*, *Artha and Kāma*. It is significant that in *Kirāta* I. 11 the author describing Yudhiṣṭhira's enemy Duryodhana refers to wealth, virtue, and desire—the three objects of worldly existence as being pursued by Duryodhana after having analysed them each in its own place, with an attachment equally balanced and not obstructing each other.

[2] *Ibid*, 116. [3] *Ibid*, 112. [4] *Ibid*, 16. [5] *Ibid*, 117.

Artha.[1] But wealth had its drawbacks also; for, we are informed that, "Great misery is for those that desire wealth, greater for him who has (already) acquired it. Greater affection is engendered on the acquired wealth and, when it goes away, the misery is great."[2] It would not be altogether out of place to mention here that the term wealth included at that time, kine, horses, milch-cows with calves, goats and sheep, as well as manufactures, and produce of the land.[3] According to the present-day political economy, wealth is anything which has an exchange value and that was also roughly the meaning attached to the work *Artha* in those days.

The dislike of agriculture continued and trade was also looked down. This dislike was due, as we said in our previous lecture, to the doctrine of *Ahiṁsā.* For, though we find sayings like, "from agriculture comes food, and food gives sustenance even to you,"[4]

[1] *Ibid,* 70-71.

[2] *Ādi,* 159.24.

[3] *Sabhā Parvan:* The gambling scenes. *Cf.* Also *Ādi* LXXXV, where paddy and oats, gems and beasts are included, and XCIII where horses, elephants, kine, and gold are mentioned. *Cf.* Also XCIV and CXXVII. The *Rāmayāṇa* also has a similar meaning, (*vide ante, p.* 72) while a similar view is expressed in the *Sukranīti* —"from cattle, corn, clothes, and the like—down to straw, objects are called wealth. Gold and the like attain valuableness when used in exchange." (II. 354 and 355).

[4] *Śānti.* CCLIII.

and "people consider the calling of agriculture as sinless," that profession was looked down as "fraught with cruelty,"[1] because "the iron-plough wounds the soil and many creatures which live there."[2] Nevertheless, it was an absolutely necessary work without which the community could not live.[3]

It is for this reason that Nārada asked Yudhiṣṭhira, whether the king was attentive to its improvement, by tanks and loans? "Are large tanks dug in your kingdom at proper distances, by which agriculture has not to depend entirely on rain? Are the agriculturists in your kingdom in want of food or seed? Do you advance them loan (of seed grain) taking only a fourth part of every hundred?"[3] Question was also asked as to whether "the four items of *Vārta* (agriculture, trade, cattle-rearing, and money-lending) are carried on in your kingdom by honest men; as upon these depend the happiness

[1] *Śānti*, CCLII-47 *Cf*. *Ādi* CVIII "O ascetic, a little insect was once pierced by you with a blade of grass; you now receive the fruit of your action." The *Ahiṁsā* doctrine could go no further!

[2] *Ibid*. 48. *Cf*. *ante*, p. 46.

[3] *Sabhā*, 51.5. We find an instance where many Brāhmaṇas reared cattle—a serious offence no doubt, for which they were debarred from entering the sacrificial compound of Yudhiṣṭhira. The Brāhmaṇa when hard pressed for a living, performed the duties of either the Kṣatriya or the Vaiśya, for which he did not fall off from virtue. When he, however, performed the duties of the lowest order, then he fell off. *Cf*. *Śānti* LXXVIII. 2.

of your subjects."[1] And again it was asked, "O king, do the five wise and brave men employed in the five chief posts (namely, that for protecting the city, fort, the merchants, and the agriculturists, and that for punishing the criminals) always do good to your kingdom by working in unison?"[2] So we find that inspite of the occasionally unfavourable attitude towards agriculture, it was one of the regal duties to see that agriculture thrived. Bhīṣma also in the *Śānti Parvan* advised the king thus: "Agriculture, the tending of cattle, trade and similar other business should be pursued by persons in such a way that they might not suffer injury. If a person engaged in agriculture, cattle-tending, or trade, feels insecure, the king incurs infamy."[3] And further, "let not the agriculturists in your kingdom leave it through oppression."[4] These passages, I believe are self-explanatory and need no comments.[5]

[1] *Sabhā*, LXXIX. [2] *Ibid*, LXXX.

[3] *Śānti*, LXXXVIII. 27 & 28. [4] *Ibid*, LXXXIX, 24.

[5] There is a passage in the *Vana Parvan*, the real object of which I cannot comprehend. 'In the days of yore, all living beings that had been created were greatly afflicted with hunger. Thereupon, the sun took compassion on them, as a father does to his children and going to the northern declension he drew up water by his rays, and coming back to the southern declension and having centred his heat in himself, stayed over the earth. While he so stayed, the lord of the vegetable world, converting the effects of the sun's heat, created the clouds. Thus, it is the sun himself, who being drenched by the lunar influence, is transformed from the sprouting of seeds into holy vegetables furnished with the six tastes. It is this which constitutes the food of all creatures on earth. Thus the food which supports the lives of creatures is the sun." *Vana*. III, 5-9.

We have already drawn your attention to the question put by Nārada to the eldest of the five Pāṇḍavas as to whether merchants did good to the country. That a considerable amount of revenue was derived from merchandise and merchants, and utilised in the payment of dues to the King's officers, is clear when we read, "O king, do your officers who are paid from the taxes to be realised from merchandise take only their just dues from the merchants that come from distant places (to your kingdom) with the desire of gain?"[1] That the merchants were well-treated is also clear from what Nārada asks whether the merchants and traders were well-treated in the King's capital and kingdom, and whether they were capable of bringing their goods without being deceived in any way?[2] One of the final injunctions of the learned Bhīṣma to his grandson was, "Take care, O king, that the traders in your kingdom, who purchase articles for purposes of trade at prices high and low, and have to sleep or take rest in forests and inaccessible regions, may not suffer from the imposition of heavy taxes."[3]

Caste system had developed more fully and we are told that "a Brāhmaṇa should live on alms, a Kṣatriya should protect his subjects,

[1] *Sabhā*, V, 114.
[2] *Ibid*, 115.
[3] *Śānti*, LIX, 23.

a Vaiśya should acquire wealth, and a Śūdra should serve the three other orders."[1] "Any one belonging to these higher castes became a Śūdra by deviating from the duties of his caste and is justly compared to a washerman who does not know how to wash away the dirt of cloth without destroying its dye."[2] So far as the Śūdra is concerned, no explanation of his duties is necessary, for it is clear that his duties were of a menial nature, while the duties of the Vaiśya have already been stated to be agriculture, cattle-rearing, trade and money-lending.

As the duties of the Vaiśya were important from our point of view, we quote the following details of his duties:—"A Vaiśya should make gifts,[3] study the Vedas, celebrate sacrifices, and acquire wealth by fair means. He should also rear up all domestic animals as a father looks after his sons. Anything else that he does should be considered as improper. By looking after the (domestic) animals, he secures great happiness. Having created the domestic animals, the Creator assigned their

[1] *Udyoga*, CXXXII, 30. *Cf.* also *Ādi*, LXXXI, where it is distinctly mentioned that the four orders had different duties and virtues which were not the same for every order.

[2] *Śānti*, XCI, 3 and 2.

[3] *Cf. Sabhā*, XLVII, where they are mentioned as the "tribute-paying Vaiśyas."

care to the Vaiśya. If the Vaiśya keeps (for others) six kine, he may take the milk of one cow as his own remuneration, and if he keeps (for others) a hundred kine, he may take a pair as his remuneration. If he trades with other's money, he may take a seventh part of profits as his share. A seventh part of the profits arising from the trade in horns is also his, but he should take a sixteenth if the trade is in hoops. If he cultivates with borrowed seeds he may take a seventh of the produce. This should be his annual remuneration. A Vaiśya should never wish that he should not tend cattle.[1] If a Vaiśya desires to tend cattle no one else should undertake that task."[2] And one of the duties of the Vaiśya as a trader was to see that his scales were perfectly even and no one was allowed to sell his goods by false scales.

In describing the duties of the four castes, we may also add that mixed castes came into great prominence in the time of the Epic, for we hear that at the time of the founder of the *Paurava* dynasty, there were no mixed castes,[3] no tillers of the land, no toilers of the mines and no sinful men.[4] We also find that such trades were becoming more hereditary for we find one termed as the *son* of a trader.[5]

[1] Manu also makes a similar observation. *Vide ante*, p. 43.

[2] *Śānti*, LX, 20-25.

[3] Intermixture of castes also referred to in *Śānti*, XC.

[4] *Ādi*, LXVIII, 6. [5] *Śānti*, CCLXIII, 36.

Of the subcastes, we find cow-herds and shepherds and note that Draupadi's first business after getting up from bed was to look after the comforts of cowherds and shepherds.[1] There was also the castes of miners and washermen who were looked down as low in the scale.

Artisans[2] are distinctly referred to, though they were also not in good books. In the ever-recurring talk between Nārada and Yudhiṣṭhira we are told that artisans had to be kept in forts to protect them,[3] while those employed by the king had to be provided with all materials that were required for the construction of those forts, as well as their wages at periods (at least) not extending for more than four months.[4]

Although we note that a sea-faring merchant was not to be allowed as a witness, and as such a discount was paid on his occupations,[5] there are clear indications that sea-voyage was resorted to. For example, we find that in the *Sabhā Parvan* Sahadeva on his mission of conquest conquered the *Mlechchha* inhabitants who lived in islands. *Vidūra* sent a boat, swift as mind or wind, with mechanism and flags made by trusted

[1] *Sabhā*, LXV, 37.

[2] The work of the artisan was evidently of a high order. Even at that age we find, "windows covered with net-works of gold and the walls set with diamonds and precious stones" (*Ādi*, CLXXXVIII, 20). The description of the palace also supports our view.

[3] *Sabhā*, V, 35. *Cf.* also *Ādi*, CIX, 4. Kauṭilya also mentions this. A similar reference has been pointed out in the previous lecture.

[4] *Sabhā*, V, 118.

[5] *Udyoga*, XXXV, 44.

artificers and capable of withstanding wind and waves to save the five Pāṇḍavās and their mother from the house of lac. Arjuna in the same *parvan* is compared with a boat which "takes us to the other shore of the sea of battle,"[1] while the same compares the sons of Pāṇḍu to persons sinking boatless in an ocean of distress.[2] *Droṇa Parvan* refers to shipwrecked sailors who might have been safe if they could get to an island, and also of a "tempest-tossed and damaged vessel in a wide ocean." An unfathomable deep is spoken of where the soldiers of Duryodhana are compared to those "whose ships have come to grief." In the *Karṇa Parvan* we also meet the sons of Draupadi rescuing their maternal uncles by supplying them with chariots, "as the shipwrecked merchants are rescued by means of boats." In the *Śalya Parvan*[3] we get a very clear reference—"they then looked like shipwrecked merchants on the vast sea without a raft to save themselves. When their protector was slain by the diadem-decked Arjuna, they were like persons on the vast sea, desirous of reaching safely some shore," and a still more clear one in the *Śānti Parvan* where the salvation attained by means of *Karma* and true knowledge is compared to the gain which a merchant derived from sea-borne

[1] *Sabhā*, LXV, 21.

[2] *Sabhā*, LXXII, 3.

[3] III, 5.

trade. And perhaps it would not be going far off the mark when we refer to the Deluge and the churning of the ocean by *Devas* and *Asuras*, and say that this had a significant meaning, *viz.*, the fight for the mastery of the ocean by the Aryans and the Non-Aryans, whatever this ocean might have been. The story, we may add, has been given in the *Śatapatha Brāhmaṇa*, and repeated at greater length and with considerable variation in the *Mahābhārata*.

I believe the most important item, from the point of view of economics, which we have got in the *Mahābhārata* is the mention of the very long list of commodities which were brought as tributes to Yudhiṣṭhira at the time of the *Rājasūya*. Some of these tributes came from *Mānasa Sarovara*, *i.e.*, the northern-most point over which Yudhiṣṭhira had little control and in fact this seems to have been the dominion of an ally. The presents from this place were "celestial silks and skins." Coming down, we find the tribute from Kamboja. The wealth of this consisted both of manufactures and the produce of land. Best kinds of skins, woollen blankets made of the soft fur of mice and other animals living in holes, and blankets made of the wool of cats—all embroidered with threads of gold were sent to the Pāṇḍavas. From *Gāndhāra* in the west of India came skins of *Reṇukā* deer and horses, while from *Prāgjyotiṣa* in the north-east

of India came horses of the best breed and wind, presented by the king himself, who also brought a number of swords with handles made of ivory and adorned with diamonds and every kind of gem. Some nameless tribe presented asses of various colors with black necks and large bodies. They also brought many horses, some red like coceinella (a sort of red insect) and some white, some of rainbow-color. They also gave a large quantity of gold of superior quality.

Then again, men with horns brought as tribute many large elephants and also horses and gold, costly carpets, vehicles and beds, armours of various colors, decked with jewels, gems and ivory and also weapons of various kinds and cars of various shapes, handsomely made and adorned with gold. Well-trained horses covered with tiger-skins, rich and variegated blankets for covering elephants, various kinds of gems and jewels were also there. Long and short arrows and various other kinds of weapons were also brought by the other northern tribes. Those living in Meru and Mandara brought heaps of gold measured in jars and raised from underneath the earth by ants.[1] Other mountain-tribes brought many soft and black *chāmars* and many others as white as moonbeam and also sweet honey extracted from flowers.[2] The Kirātas brought

[1] *Cf.* Megasthenes: The gold-digging ants.

[2] Honey referred to as one of the tributes levied by the king in Manu. *Vide ante*, p. 52.

loads of sandal, aloes and heaps of valuable skins, perfumes and also much gold. From the Malaya hills came loads of sandal, costly gems and many fine cloths embroidered with gold. The Kalingas and Māgadhas brought elephants with girdles of gold and coverlets of fine blankets and clad in defensive armour.

Those who were born in regions on the sea-shore, brought goats and kine, asses and camels, vegetable, honey and blankets ; jewels and gems were brought by people who lived upon crops that depended on rainfall or the river. People of the sea-coast gave as tribute ten thousand various asses of good size, also woollen blankets made in "*chin*,"[1] also many skins of *Reṇukā* deer and many other cloths made of jute and others made of the wool of animals. They also gave thousands of other cloths (not made of cotton) and all possessing the colour of the lotus, of smooth and soft texture. They also brought thousands of soft sheepskins, also many sharp and long swords and scimitars, hatchets and fine-fledged battle-axes, manufactured in the western countries as well as thousand kinds of perfumes, jewels and gems. The Cholās and Pāṇḍyas sent sea-borne gems and heaps of pearls while the kings of Ceylon brought hundreds of coverlets.

[1] Does it refer to China ?

A modern economist may as well try to find out whether all these things are now produced in India.

After having placed before you the names of commodities, it is only natural that I should place before you the names of some countries mentioned in the *Mahābhārata* with which *Hastināpura* had commercial dealings. These names are mentioned in connexion with the *Digvijaya* (conquest) of the brothers before the *Rājasūya* sacrifice. Magadha, at that time, was ruled by Jarāsandha who was a very powerful king, if not more powerful than the Pāṇḍavas themselves, for we note how the refusal of the Pāṇḍavas to offer him homage, was so much resented. Magadha was looked down upon very much in the Vedas and it appears that the same disregard continued even to the days we are speaking of. The kings of *Banga* and *Panchāla* were then under the suzerainty of the Magadhan king. *Prāgjyotiṣa*, as we have already said, sent tribute to the king (and we may conclude that it had commercial relations with Hastināpura) while *Brihantas* and the neighbouring countries also enjoyed such privileges. Arjuna went for purposes of conquest to the *Mānasa Sarovara* and we would not be surprised if there was trading connexion with the regions near the great lake. We are told of *Kamboja* [1] the blankets of which

[1] Kauṭilya also mentions the blankets of "Kāmbhoja."

are as famous now as they were then. Of the other countries *Kāshi* and *Videha* are mentioned. Sahadeva was sent towards the south-west, to the banks of the Narmadā, which is distinctly mentioned. Kiṣkindhyā is also mentioned.

So far as the currency of the period[1] was concerned we frequently meet with *Niṣka* which was evidently one of gold.[2] It is mentioned in the following places, among others.

(*a*) *Sabhā*, LIII—where Duryodhana in describing the wealth of Yudhiṣṭhira spoke of a couch which Viśhwakarmā had constructed with a thousand *Niṣkas* of gold.[3]

(*b*) In the same *Parvan* where Yudhiṣṭhira was describing his wealth in the Assembly Hall before the assembled Kurus and Pāṇḍavas he spoke of his many beautiful jars each filled with one thousand *Niṣkas.*

(*c*) When Yudhiṣṭhira reascended the throne, one of his first acts was to give a thousand great Brāhmaṇas of the *Snātaka* order a thousand gold *Niṣkas.*

(*d*) After the *Aśvamedha* sacrifice he gave away to the Brahmaṇas a thousand crores of golden *Niṣkas.*

[1] "Coined and uncoined" money mentioned in *Ādi*, CXIII. 14-15.

[2] "The money recognized is gold and silver, "made and unmade" and niṣkas, though chests of precious metal are mentioned and a great deal of money is found when excavating for measure." Hopkins: *The Great Epic.*

[3] *Cf. ante* p. 36.

One question which is of importance both to the student of Economics as well as to the student of Political Philosophy is that of the levying of taxation. Prof. Bhāndārkār, in his admirable Carmichael lectures, refers to the importance of the *Śānti Parvan* of the *Mahābhārata* in studying ancient Indian Political Philosophy and we shall also depend on the same *Parvan* to deal with the methods of taxation. "A king should milk his kingdom collecting honey from plants. He should act like the cowherd who takes milk from her without burning her udders and without starving the calf.[1] The king should act like the leech taking blood mildly. He should treat his subjects like a tigress carrying her cubs, touching them with her teeth but never cutting them therewith. He should behave like a mouse which although it has got sharp and pointed teeth yet cuts the feet of sleeping animals in such a way that they do not at all become conscious of it. Little by little should be drained from a prosperous subject. The demand should then be gradually increased till it reaches a fair amount. The king should increase the burden of his subjects by and by like a person gradually increasing the load of a young bullock. Treating them with care and mildness, he should at last put the

[1] *Śānti*, LXXXVIII & CXXIX. The same idea is expressed in Chapter LXVII—"The cow should be easily milked."

reins on them. If the reins are thus put, they would not refuse to bear them."[1] And again, "the king should never impose taxes in a bad form and on persons who cannot pay them. He should impose them gradually and with mildness, in proper time and according to due forms."

The proportion of taxes to the income of each individual is mentioned in Chap. CXXXIX of the same *Parvan*. "Taking from his subjects a sixth part of their riches, he should protect them all."[2] It is also mentioned in Chap. LXXI that "with a sixth part, making a fair calculation of the produce of the soil, as his tribute, with fines and forfeitures collected from offenders, with the other taxes, *according to the scriptures*, upon merchants and traders in exchange for the safety granted to them a king should fill his treasury."[3] And what was the object of taxation—that which would secure the good of his subject as also of the king?[4] For, "that king whose subjects are always stricken with anxiety or laden with taxes and overwhelmed with all sorts of evils is defeated by his enemies."[5]

With reference to this, Prof. Hopkins, whose extremely learned article on the "*Position of the Ruling Caste n India*," published in the *Journal*

[1] Śānti, LVIII, 3-9. [2] 99. [3] 10.
[4] LXXXVIII. 3. [5] CXXXIX, 108.

of the American Oriental Society[1] has rightly acquired a classical celebrity, observes, "the proper tax to levy which the king is enjoined, and in taking which he does no wrong, is in the proportion of one-sixth of the annual gain got by the party taxed, with special rules for special cases. This regular rate is not regarded as imposing a heavy tax. Further statutes show that it may be increased, and permit even a fourth of the annual income to be taken, in time of need, *i. e.*, when danger threatens—the king in each case incurring the same proportion of the people's sins if he does not return the barter-value of this tax in protecting the people." "The further advice that the King should be merciful toward his people 'as if toward the gods' is, as shown by many examples, based rather on the utilitarian principle, that 'a realm is like a cow; it must not be over-milked,' than on any principle of abstract right. An idea of what was reasonable in taxation may be drawn from the converse of a rule in regard to the King's expenditures. We are told that he ought to be every morning informed of what he has spent, and that his (yearly) expenditure ought not to cover more than three-fourths of his income. (ii. 5. 70-72). That is to say, he ought to tax

[1] Vol. XIII. *Vide ante* p. 81. I have here only enlarged the same idea with special reference to the Mahābhārata.

heavily enough largely to increase his actual needs in private and public outlay. One half, one quarter, or three quarters, are given as the legitimate ratios of expense to income."

I again quote from him, because I am afraid I cannot accept the view of so eminent a scholar. He goes on, " the possibility of the kingdom's existing without taxation seems specially to irritate the compilers of the pseudo-Epic. They revert to the subject again and again, and prove that the king must have wealth; his army, his happiness, his virtue depend on it; 'as a robe conceals a woman's nakedness, so does wealth conceal sin; therefore, let him get wealth, even if he be so sinful (xii. 133.7). The twelfth book says in effect to the king: "rules do not hold in certain contingencies; do not ordinarily tax too much; but yet let your first care be to keep your treasury full; if it is necessary to tax heavily in order to this end, do so; money is the chief thing; wealth is a necessity; let the king imitate the people, they make as much as they can; for poverty is a crime."

It is regrettable that even an erudite scholar of the type of Professor Hopkins comes to such a conclusion. He has himself admitted that, "all taxation more than legal is decried." He has quoted that "For love's sake, the priests, the warriors, the men of the people, the slaves, the barbarians, all the folk,

high and low, brought tribute to the king."[1] The passage, we have quoted above, *viz.*, that "the king should never impose taxes in a bad form and on persons who cannot pay them; he should impose them gradually, and with mildness in proper time and according to due forms" is significant. Then again, in the same chapter Yudhiṣṭhira is enjoined "to punish and dismiss those officers who realize from the subjects more than what is due, and appoint others who will take only what is due."[2] And we can also refer to the treatment regarding the levying of taxes from those who by bearing the burden of the king, supported also the residents of the kingdom.[3]

Indeed, in studying these questions we may take into consideration that in those days very great importance was paid to rules of religion. One "became a king in those days for advancing the cause of virtue and not for acting capriciously"[4] and if the king acted piously, he attained to the dignity of a god and if he acted unrighteously he sank into hell.[5] "Never desire to fill your treasury by acting unfairly or from covetousness."[6] "That avaricious king, who foolishly oppresses his subjects by levying taxes not sanctioned by

[1] *Śānti*, LXXXVIII.
[2] *Śānti*, LVIII, 26.
[3] *Śānti*, LXXXIX, 24.
[4] *Śānti*, XC, 3.
[5] *Śānti*, XC, 4.
[6] *Ibid*, LXXI, 18.

scriptures will wrongs his own self."[1] Not only that, there was also, if I may say, a selfish interest for he is distinctly advised that "he should in his kingdom, adopt such measures as would in his view secure their good as also his own."[2] And again, "He, who treats a milch cow with kindness, always obtains milk from it. Likewise the king who rules his kingdom by proper means, gets much fruits from it."[3] There was no need of covetousness at that time, for "The earth, well protected by the king, yields crops and gold like a mother giving milk willingly to her child."[4] I might increase my illustrations, but I do not think it necessary and I submit that the above extracts are significant as proving the real state of affairs.

[1] , *Śānti*, LXXI, 15. *Cf.* also *Śānti*, CXXIV, 103 ff.
[2] *Ibid*, LXXXVIII, 3.
[3] *Ibid*, LXXI, 17.
[4] *Ibid*, LXXI, 19.

LECTURE V

THE IMPERIAL MAURYAS AND ECONOMIC DEVELOPMENT

During a victorious war, Horace Walpole is said to have observed, "It was necessary to ask every morning what victory there was, for fear of missing one." Exactly the same thing may at the present time be said of ancient Indian history and discoveries relating to it. Thanks to the impetus received by the study of ancient Indian History through various causes, not the least important of which is the inauguration of the study of ancient Indian culture by the Calcutta University, under the guidance of its helmsman, scarcely a day passes when we do not hear of something new regarding this important branch of knowledge. The discovery of Kauṭilya's Arthaśāstra, one of the most interesting and valuable Sanskrit works, by Pandit Shama Shastri, to whom scholars will remain indebted not only for the discovery but also for the great care and industry shown by him in placing before them an English translation of the same, is an important

factor. It is "a unique record of the secular and practical activities and achievements of the Hindu genius as distinguished from the intellectual and spiritual, of which there is so much evidence in the extant Sanskrit and Pali literature and of which so much has been said and written; and a proper study of this most interesting work is well calculated to remove one of the wide-spread and deeprooted misconceptions about ancient Hindu civilisation, which is supposed to have distinguished itself only in the sphere of thought, and to have miserably failed in that of action."[1]

Indeed, in all the domains of ancient Indian culture, political, social, and economic, we cannot have a better book than this *Vade-mecum* of the Science of Polity in which we find "a combination of theory and practice, principles of Government as well as administrative details and regulations, treated with a touch of refreshing realism which is born only of a living experience of actual problems and contact with facts." In all my papers relating to ancient Indian culture bearing on economic history, I have made a free use of its contents, and in the present lecture, I will give you some idea of the economic development of India in the days of the Imperial Mauryas, as evidenced in

[1] Dr. R. K. Mookerjee's Introduction to N. Law's *Studies in Ancient Hindu Polity*.

this book and corroborated by contemporary foreign accounts. It would not be out of place to mention in this connection the book *Studies in Ancient Hindu Polity* by my learned friend Dr. Narendra Nath Law, which is based on this Arthaśāstra of Kauṭilya and other books on Polity.

The Arthaśāstra, in its second Book, gives us ample material for the study of economic questions in the days of the Imperial Mauryas. We find mention of a number of officers of the king, whose duties were to effect improvements in the state, which of course, ultimately led to the economic improvement of the country. I shall name some of the officers with their respective duties and shall deal with some important topics relating to their functions.

(1) The first of these officers was the Superintendent of Mines. He was required to have a knowledge of metallurgy, and the art of distillation and condensation of mercury, and the methods of testing gems. He had, as his assistants, experts in mineralogy while he had under him labourers who were well equipped to work in mines with necessary instruments. He had to look after mines for purposes of development and specific instructions are recorded by the author as to the discovery of metals in the mines. We note here the centralization of commodities manufactured from minerals as well

as their production on a large scale.[1] We see that Government reserved both mining and commerce in minerals and mineral products as a state-monopoly.

Before the discovery of Kauṭilya's Artha-śāstra, we had to depend on Megasthenes for reference to numerous veins of metals underground containing "much gold and silver, and copper and iron in no small quantity and even tin and other metals."[2] This gives us only an indication of the existence of metals which even now are the cynosure of the exploiting nations of the world. But what a wealth of material regarding mining and allied industries is to be found in this cyclopædia and with what details of information! A whole chapter[3] is devoted to this interesting question.

It is found that not only plains and mountains but also ocean-mines[4] were examined with the view of collecting conch-shells, diamonds, precious stones, pearls, coral and salt.[5]

The classification of metals as made by Kauṭilya, the method of their purification and their number and variety compel everybody

[1] Book II, Chap. XII.

[2] Megasthenes, B. I. Frag. I. (McCrindle). *Cf.* also Pliny's *Natural History*, VI, 25.

[3] Book II, Chap. 12.

[4] *Ibid.*

[5] The Superintendent of Ocean-mines had also to regulate the commerce of the above commodities. *Vide* p. 112.

to admit that even in those days, this important branch of knowledge for improving the wealth of the country had made a good deal of progress.

The mines yielded ample revenue. Ten kinds of revenue were collected,[1] *viz.*:—

(*a*) Value of the output.
(*b*) Share of the output.
(*c*) Premium of 5%.[2]
(*d*) Testing charge of coins.
(*e*) Fine.
(*f*) Toll.
(*g*) Compensation for loss entailed on the king's commerce.[3]
(*h*) Fines to be determined in proportion to the gravity of crimes.
(*i*) Coinage.
(*j*) Premium of 8 p.c.

Kauṭilya advises that such mines as can be worked out without much outlay shall be directly developed by Government-agency, while those that required a large outlay were to be leased out for a fixed share of the output or for a fixed rent.[4] He advocated the centralisation of mineral products,[5] and advised that mining

[1] II. 12.

[2] "In kind or cash due to the difference between royal and market weights and measures amounting to 5%."—*Translator.*

[3] This evidently refers to those where the monopoly was enjoyed by the king.

[4] II. 12. [5] *Ibid.*

and commerce should be kept as a state monopoly.[1] The king was advised to carry on mining operations to avoid having a depleted treasury.[2] Attempts were made to work mines with less labour and capital, while in making a distinction between a small mine of valuable yield and a big mine with minerals of inferior value, Kauṭilya went against the opinion of the teachers who advocated development of the former, and observed that "there is the possibility of purchasing valuable commodities by accumulated articles of inferior value, collected from a vast and longstanding mine of inferior commodities."[3] And while speaking of trade routes, he suggested that that trade-route which traversed a large number of mines was to be preferred.[4] This proves the importance which he and the men of his time attached to mining.

(2) Then there was the Superintendent of Metals[5] whose duty was to carry on the manufacture of copper, lead, tin, mercury, brass, bell-metal, sulphate of arsenic, *lodhra* and other commodities manufactured from them.

(3) The Superintendent of Mint[6] (the officer in charge of the Mint) was to carry on the manufacture of silver coins of various denominations

[1] *Ibid.* [2] II. 1. [3] VII. 12.
[4] *Ibid.* [5] II. 12.
[6] *Taṅkaśālādhikāri.* II. 12.

and also copper coins[1] made of four parts of copper and one sixteenth part of any one of the minerals, *tīkshṇa*, *trapu*, *sīsa*, and *añjana*.

(4) There was also an Examiner of Coins[2] for regulating currency both as a medium of exchange and as legal tender. The directions given here showed that coins were largely used and every effort was made to preserve the purity of coinage.[3] In fact the regulations in existence then, fully contradict the statement of Mr. V. A. Smith that, "the introduction into India of the use of coins, that is to say, metallic pieces of definite weight authenticated as currency by marks recognised as a guarantee of value, may be ascribed with much probability to the seventh century B.C. when foreign maritime trade seems to have begun,"[4] for we find here conclusive evidence of earlier introduction.

(5) Ocean-mines also were productive, for there was a Superintendent of Ocean-mines who had a double duty, *viz.*, to attend to the collection of conch shells, diamonds, precious stones, pearls, coral and salt, and also to regulate the commerce in these commodities.

[1] The commentator observes in this connexion, "Having described coins that deserve to be received into the treasury, the author goes on to describe *token* coins."

[2] II. 12.

[3] *Cf.* The Duties of the State Goldsmith, II. 14.

[4] *Imperial Gazetteer*, II. 135. *Cf.* also J. B. O. R. S., Vol. VI, *Notes on Economic History of Early India*. In his C. C. I. M. C., V. A. Smith assigns an even later date to the earliest coinage of India, the Kārṣāpaṇas according to him, being of 500 or 600 B.C.

(6) There was the Superintendent of Gold, with a goldsmith's office to manufacture gold and silver jewellery.[1] The state goldsmith was to employ artisans to manufacture gold and silver coins, which was a state monopoly. The lowering of standard of even a *māṣā* was severely punished. Standard weight had to be maintained.

(7) Further, there was a Superintendent of Store-house[2] with the following duties: to supervise the accounts of agricultural produce, taxes from the country-parts, commerce,[3] barter, manufacture of rice, oils, accidental revenue, etc. One of his duties was the prevention of famine, for we are told that "of the store collected, half shall be kept in reserve to ward off the calamities of the people and the other half shall be used." We are also told that the old stock was to be replaced by new supply.[4]

(8) There was a Superintendent of Commerce[5] whose primary duty was to ascertain demand or absence of demand for, and rise or fall in the price of, various kinds of merchandise which might be the products—either of

[1] In the Jātaka, we have an officer called "Inspector of King's Jewels." VI. 194.

[2] II. 15.

[3] Commerce had a technical meaning here, *viz.*, sale-proceeds of grain, grain purchased and the collection of interest in kind or grain debts.

[4] II. 15.

[5] II. 16.

land or water, and which may have been brought in either by land or water. Besides, he had to centralise the locally manufactured merchandise forming part of the monopoly of the King, while he had to distribute in several markets the imported merchandise for sale. To encourage commerce, he had to show favor to those who imported foreign merchandise by remission of taxes: he had likewise to show favor to mariners. Special facilities were rendered to foreign merchants and is evidenced from the fact that they were exempted from being sued for debts. This officer had to be particularly clever, for he had to look after the sale of foreign merchandise in the following manner:—

"Having ascertained the value of local produce as compared with that of foreign produce that can be obtained by barter, the Superindent will find out (by calculation) whether there is any margin left for profit after meeting the payments (to the foreign king), such as the toll,[1] road-cess, conveyance-cess, tax payable at military stations, ferry-charges, subsistence to the merchant and his followers, and the portion of merchandise payable to the foreign king. If no profit could be realised by selling the local produce in foreign countries, he had to consider whether any local produce can be profitably

[1] *Śulka.*

bartered for any foreign produce. Then he might send one quarter of his valuable merchandise through safe roads to different markets on land, or he might take his merchandise to other countries through rivers."

(9) Forests yield a good revenue to the state and Kauṭilya was not unmindful of this important and profitable item of revenue. Here also there is an elaborate classification of forests and timber. The Superintendent of Forests[1] had not only to start productive works in forests, but also to fix adequate fines and compensations to be levied from those who caused any damage to productive forests. It is interesting to note that not only timber, bamboo, creepers, fibrous plants, leaves and flowers had to be looked after by this officer, but also poisons, skins and bones of animals found in the forests.

(10) There was the Superintendent of Tolls[2] who had to erect near the large gate of the city a toll-house with a flag, facing either the north or the south. When merchants with their merchandise arrived at the toll-gate, four or five collectors were to note down who the merchants were, whence they had come, the amount of merchandise they had brought and where for the first time the seal-mark had been put upon the goods. There were strict regulations regarding imported and exported merhandise.

[1] II. 17. [2] II. 21

There were three kinds of merchandise, *viz.*, external, *i.e.*, arriving from the country, internal, *i.e.*, manufactured inside forts, and foreign, *i.e.*, imported from foreign countries. Seal-marks had to be used by all, and those who failed, had to pay twice the amount of toll. Attempts were made to prevent counterfeit seals. Evidently undue attempts to raise the price of any commodity were kept down for the enhanced price, or twice the amount of toll, went to the king. Commodities had to be precisely weighed, measured, or numbered. Commodities for presentations or sacrificial performances or gifts were let off without toll.

The officer-in-charge of the boundaries had to help the Superintendent of Tolls regarding imported commodities. The regulations in this matter had the object of encouraging import, but there is nothing on record to show that export was discouraged.

(11) There was the Superintendent of Weaving [1] whose duty it was to employ qualified persons to manufacture threads, coats, cloths, and ropes. Weaving has been encouraged in India from time immemorial [2] and here also we note that those who manufactured fibrous cloths, raiments, silk cloths, woollen cloths, and cotton

[1] II. 23.

[2] *Vide* "Notes on Economic condition of Early India" (J. B. O. R. S., Vol. VI). *Vide* also *ante* p. 30.

fabrics were rewarded. As is the case now-a-days labourers working overtime were given extra payment and those who did not do their work well had their wages cut off. The instructions show that the organisation was in a highly developed state. Various sorts of labour—widows, cripples, women, girls, mendicants, and even ascetic women could work, and special rewards were given for working on holidays. In addition to fibrous clothes and raiments, silk cloths, woollen cloths, cotton fabrics, and various other sorts of garments, *e.g.*, blankets and curtains were also manufactured in India.

(12) The Superintendent of Agriculture [1] had either to acquire the knowledge of the science of agriculture[2] dealing with the plantation of bushes and trees, or he had assistants who were trained in such sciences. The Science of Meteorology had been developed considerably and the Superintendent had to sow the seeds according to the rainfall and the changes of the season.

(13) There was the Superintendent of Liquor who had to centralize or decentralize the sale of liquor according to demand and supply, and who had to employ those who were acquainted with the manufacture of liquor and ferments. [3]

[1] II. 24. [2] Chāṇakya observes, "Agriculture, cattle-trading and trade constitute *vārtā*. It is serviceable in causing increase of grain, cattle, gold and other metals and labor." [3] II. 25.

There were specific injunctions as to how persons were compelled to drink liquor within the shops and not allowed to go out to drink. Liquor was not allowed to be taken out of villages, nor were liquor shops allowed to be close to each other. This shows how decency was always kept in view for even though revenue had to be considered, liquor, other than fresh liquor, was not allowed to be sold.

(14) One of the important officers was the Superintendent of Ships [1] who had to examine the accounts relating to navigation not only on oceans and mouths of rivers but also on natural or artificial lakes and rivers. He had to observe the customs prevalent in commercial towns as well as the orders of the Superintendent of Towns. That particular attention was paid to commerce is evidenced from the fact that when any weather-beaten ship arrived at a port-town, the Superintendent of Ships had to show fatherly kindness to it, while vessels carrying on merchandise spoilt by water had to be exempted from toll. It was the further duty of the Superintendent to make good the loss of merchandise whenever a ship would founder owing to want of hands or on account of ill-repair, because presumably the loss was due not to any fault of the merchant but to defects in the state vessel and therefore

[1] II. 28.

must be made good from state funds. Special facilities were given to foreign merchants who often visited the country as well as to those who were well known to local merchants. Various were the other duties of this important officer. During the rainy season, the crossing of rivers had to be prohibited. In dangerous rivers, only safe vessels could be launched. He had to enforce strict regulations regarding the fording or crossing of rivers, and the Superintendent could make exceptions where trade and public good were concerned. Dr. Mookerjee has very well summed up the kinds and degrees of the maritime activity of the period as evident from the various kinds of port-taxes that were levied. "Thus, villages on sea shores or on the banks of rivers and lakes had to pay regularly a fixed amount of tax. Fishermen had to yield one-sixth of their haul as fees for fishing license. Merchants also had to pay the customary-tax levied in port towns. Passengers arriving on board the State or the king's ship had to pay the fixed and requisite amount of sailing fees. State boats were also let out to those who wanted to use them for pearl-fishery or for fishing for conch shells and they had to pay the required amount of hire; but they were also free to use their own boats for the purpose. Besides these taxes payable to the Port Commissioner, there were the various sorts of ferry fees, which are also very interesting

and equally indicative of a brisk trade and a throbbing commercial life."[1]

It is quite possible that these regulations were also in force in the reign of the Great Aśoka and in the words of V. A. Smith, "when we remember Aśoka's relations with Ceylon and even more distant powers, we may credit him with a sea-going fleet as well as an army"[2] and perhaps we would not be going far if we say that the religious missions to Syria, Egypt, Cyrene, Macedonia and Epirus led also to the establishment of commercial relations.

The story from *Bodhisattvāvadāna Kalpalatā* regarding Indian mercantile activity in the Eastern waters clearly indicates that the progress of the foreign trade and naval activity of India during the days of the Emperor Chandragupta continued also in the days of Aśoka the Great. We find how the Emperor Aśoka, seated on the throne in the city of Pāṭaliputra, while holding his court, was one day approached by some Indian merchants who traded with distant lands. They informed him of their losses and complete ruin brought about by the depredations of sea-faring pirates called *Nāgas* who destroyed all their ships and plundered their treasure. They said that if the Emperor was disposed to be indifferent to them, they would no

[1] P. 106. Dr. Mookerjee's A *History of Indian Shipping and Maritime Activity.*

[2] *Early History of India.*

doubt be forced to take to other ways of earning their livelihood, but the imperial exchequer would in that case be liable to be emptied owing to the absence of sea-voyages, *i.e.*, if there was a slackening of the seaborne trade and a consequent fall in the export and import duties. Then the story goes on to relate how Aśoka issued an edict.

(15) The last important officer with whom we are concerned was the Superintendent of Passports[1] who had to issue passes enabling people either to come in or go out of the country.

The brief but tantalising references regarding the duties of the various officers under the Imperial Mauryas will give you an idea not only that there were various industries and trades which were organised by the State, which enjoyed monopolies in many of them, but also that foreign commerce was duly encouraged. It would not be altogether out of place to mention that for the prevention of smuggling, spies were appointed.[2] They had particular instructions regarding foreign merchandise of superior or inferior quality arriving by land or water, and to ascertain the amount of toll, road-cess, conveyance-cess, military-cess, ferry-fare, and one-sixth portion (paid or payable by the merchants),

[1] Book II. 34. This officer has also been mentioned in II. 5.
[2] I. 11 and II. 25.

the charges incurred by them for their own subsistence and for the accommodation of their merchandise in the warehouse.[1]

There are various other indications of economic development. Let us take for example some of the industries which were under state control, *e.g.*, the manufacture of salt which was conducted under the Superintendent of Salt.[2] He had to collect in time both the money-rent and the share of salt due to the Government. He was also to realise not only its value but also the premium of 5%, both in cash and kind by the sale of salt. To prevent the importation of salt. there was a toll to compensate for the loss entailed on the King's commerce. Then again, traffic in liquor was also evidently under the direct control of the state, being looked after by a Superintendent of Liquor who had under him men possessing expert knowledge in the manufacture of liquor and ferments.[3]

There was another measure, an essentially economic one, namely, the Census, and in the words of my learned friend Kumar Narendranath Law, "the distinguishing feature of Chandragupta's census appears to be that it was not periodical but a permanent institution—department of the State run by permanent officials."[4]

[1] II. 25. [2] II. 12. [3] II. 25.
[4] *Studies in Ancient Hindu Polity*, p. 107.

Census had been in existence in several ancient countries of the world. We know that the fighting strength of the children of Israel at the Exodus was ascertained. During the Babylonian captivity, a register of the population of each clan was kept. For fixing the tribute, there was apparently some method in force in Persia. Solon introduced an Egyptian ordinance in Athens which afterwards developed later into an electoral record.[1] But "it was in Rome, however, that the system from which the name of the inquiry is derived, was first established upon a regular footing. The original Census was ascribed to Servius Tullius and in the constitution which goes by his name, it was decreed that every fifth year the population should be enumerated along with the property of each family—land, livestock, slaves and freedmen. The main object was to ensure accurate division of the people into the six main classes and their respective centuries which was based upon consideration of combined numbers and wealth....The word census, too, came to mean the property qualification of the class, as well as the process of registering the resources of the individual."[2] But the Mauryan census was superior to all these. It was a permanent institution, important from the political as well as from the

[1] *Vide* the Encyclopædia Britannica, Eleventh Edition.
[2] *Ibid.*

economic view. As Megasthenes observes, "The third body of Superintendents consists of those who inquire when and how births and deaths occur, with the view not only of levying a tax but also in order that births and deaths among both high and low may not escape cognizance of Government."[1] By such a Census, not only the total number of the inhabitants of all the four castes in each village, but an account of the exact number of cultivators, cowherds, merchants, artisans, labourers, slaves and biped and quadruped animals, fixing at the same time the amount of gold, free-labor, toll and fines that can be collected from each house were recorded. The number of young and old men that resided in each house, their history, occupation, income and expenditure were noted down.

We may, in passing, also mention the duties of the Board responsible for the systematic registration of births and deaths, for the information of the Government as well as for facility in levying taxes. Well might the historian of ancient India loudly acclaim it and observe, "The spontaneous adoption of such a measure by an Indian native state in modern times is unheard of and it is impossible to imagine an old-fashioned Raja feeling anxious that 'births and deaths among both high and low might not be concealed.'"[2]

[1] Book III, Frag. 32. [2] Megasthenes, Book, IV, 2 & 7.

Even the Anglo-Indian administration with its complex organisation and European notions of the value of statistical information, did not attempt the collection of vital statistics until very recent times, and has always experienced great difficulty in securing reasonable accuracy in the figures."[1] It was, "a most reliable index to the material condition of the people."[2]

Then there is the reference to the traders who united to cause rise and fall in the value of articles and lived by making profits cent. per cent. This was evidently what we in modern days call "cornering," though as I have already expressed, I am tempted to think that cornering was done by the kings themselves.[3]

My brief sketch of the economic activities would be fittingly concluded by a still more brief reference to the activitie of the guilds as referred to by Chāṇakya.

It would appear that in the Maurya regime, very great importance was attached to guilds of all sorts—political, economic, and social. So far as the economic ones were concerned, we note that they had special privileges and enjoyed particular concessions. Guilds served to a certain extent the purposes of banks, as they were permitted to receive deposits.[4] We also note

[1] *Early History of India,* p. 128.
[2] *Studies in Ancient Hindu Polity,* p. 115.
[3] *Vide ante,* p. 55. [4] IV. 1.

that special places were reserved for them in the buildings within the fort.[1] Guilds of workmen were allowed a grace of seven nights over and above the period agreed upon for fulfilling their engagement.

Due importance was paid to commerce. Kauṭilya rightly said, "Prosperity of commerce led to financial prosperity."[2] We have already mentioned that there was an officer called the Superintendent of Commerce[3] whose duty was to facilitate internal as well as external trade, and while speaking of him, we mentioned his duties and incidentally referred to the part which he had to play in the encouragement of commerce. He had to show favour to those who imported foreign merchandise,[4] while he had to show favour also to the mariners and merchants importing foreign merchandise, by a remission of taxes. Protection was rendered to merchants[5] in various ways, while to prevent the excessive supply of merchandise, he had to centralise its sale and prohibit the sale of similar merchandise elsewhere before the centralised supply could be disposed of. He was required to be favourably disposed towards the people, while he had to pay due regard to goods imported from a distant country.[6]

[1] II. 4. [3] II. 16. [5] IV. 2.
[2] II. 7. [4] *Ibid.* [6] *Ibid.*

The King himself was enjoined to afford facilities for commerce[1] and to construct roads for traffic both by land and water.[2] The Superintendent of Tolls was to make good whatever was lost by merchants[3] and to carefully examine foreign commodities as to their superior or inferior quality.[4] And we have already mentioned how foreign merchants who often visited the country, as well as those who were well known to local merchants, were to be allowed to land in port towns.[5]

Megasthenes, speaking of the administration of public affairs refers to the second Board which attended to the entertainment of foreigners.[6] "To these they assign lodgings, and they keep watch over their modes of life by means of those persons whom they give to them for assistants. They escort them on the way when they leave the country, or in the event of their dying forward their property to their relatives. They take care of them when they are sick, and if they die bury them." The fourth Board, as we also find, superintended trade and commerce. As Mr. V. A. Smith observes, "the existence of these conclusively prove that the Maurya empire in the 3rd century B.C. was in constant intercourse with foreign states and that large numbers of strangers visited the capital on

[1] II. 1. [2] *Ibid.* [3] II. 21.
[4] *Ibid.* [5] II. 28. [6] McCrindle's Edition, p. 87.

business."[1] And it was for this purpose that "private ships which were bound for the country of an enemy as well as those which violated the custom and rules in force in port and owners were to be destroyed."[2] Arrian's testimony that "ship-builders and sailors employed in naviga. tion" enjoyed special privileges is an excellent testimony to the attention paid to commerce in those days[3] and well might the venerable seer Dr. Seal acclaim, "one broad historical generalization stands out clearly and convincingly, of which all histories of world culture will do well to take note, *viz.*, the central position of India in the Orient world, well nigh two thousand years, not merely in a social, a moral, a spiritual, or an artistic reference, but also and equally in respect of colonizing and maritime activity and of commercial and manufacturing interests."[4]

From internal evidence it would appear that the Maurya empire had commercial relations at least with the following countries and provinces[5]:—

(*a*) Pāṇḍya

(*b*) Siṁhala

[1] *Early History of India*, p. 127.

[2] II. 28.

[3] Arrian, Mc.Crindle's Edition, p. 211.

[4] Introduction to Dr. Mookerjee's *History of Indian Shipping and Maritime Activity.*

[5] II. 11.

(*c*) Kerola
(*d*) Persia
(*e*) Barbara
(*f*) Countries bordering on the Himālayas
(*g*) Vidarbha
(*h*) Kośala
(*i*) Benares
(*j*) Indravanaha
(*k*) Kāmarupa
(*l*) Vaṅga
(*m*) Madhurā
(*n*) Koṅkana
(*o*) Kaliṅga
(*p*) Kauśāmbī
(*q*) Mahiṣa

Commerce and colonisation (our next subject), depended very much on ship-building. We have already referred to an officer called the Superintendent of Ships and we have also drawn your attention to the importance paid to this officer by Chāṇakya. But other evidence also is not wanting and we will mention it here.

Those of us who are familiar with the account of the invasion of Alexander the Great know the fact of his utilizing the Indian navy for his own purposes. His passage across the Indus was mainly through the instrumentality of Indian boats and these were also helpful when he crossed the Indus to inflict the crushing

defeat on Porus.[1] Further, while Alexander was making his preparations for the voyage of Nearchus, the Xathroi[2] supplied him with galleys of thirty oars and transport vessels built by themselves. And it would not be assuming too much when we say that the huge fleet of the Macedonian hero consisting of 800 to 2,000[3] vessels were of Indian make. Dr. Vincent, the annotator of the voyage of Nearchus, has rightly observed:

"The Ain-i-Akbari reckons the Punjab as the third province of the Mogul Empire, and mentions 40,000 vessels employed in the commerce of the Indus. It was this commerce that furnished Alexander with the means of seizing, building, hiring or purchasing the fleet with which he fell down the stream and when we reflect that his army consisted of 124,000 men with the whole army at his command and that a considerable portion of these had been left at the Hydaspes during the interval that the main body advanced to the Hyphasis and returned to the Hyphasis again, we shall have

[1] Arrian, V. 8. "It may be stated with certainty that ship-building was in those very ancient days (so far back as 325 B.C.) a very flourishing industry giving employment to many and the stimulus to its development must have come from the demands of both river and ocean traffic." *Modern Review*, 1909.

[2] Mr. V. A. Smith considered them to be Kṣatriyas. *Early History of India*, p 99.

[3] Ptolemy is responsible for this number.

no reason to accuse Arrian of exaggeration when he asserts that the fleet consisted of 800 vessels of which 30 only were ships of war and the rest such as were usually employed in the navigation of the river. Strabo mentions the proximity of Emodus which afforded facility for fir, pine, cedar and other timber; and Arrian informs us that Alexander in the country of the Assaconi and before he reached the Indus, had already built vessels which he sent down the Kophenes to Taxila. All these circumstances contribute to prove the reality of a fact highly controverted, and even though we were to extend the whole number of the fleet comprehending tenders and boats, with some authors to 2,000, there is no improbability sufficient to excite astonishment."[1]

The author of the *Disquisition concerning Ancient India* made similar observations. "That a fleet so numerous should have been collected in so short a time is apt to appear at first sight incredible. But as the Punjab country is full of navigable rivers in which all the intercourse among the natives was carried on, it abounded with vessels ready constructed to the conqueror's hands, so that he might easily collect that number. If we could give credit to the account of the invasion of India by

[1] Vincent's *Voyage of Nearchus*, p. 12.

Semiramis, no fewer than 4,000 vessels were assembled in the Indus to oppose her."[1]

Add to this the testimony of Megasthenes who refers to the Board of Admiralty to co-operate with the admiral,[2] and the other references made before, and we have every reason to say that the "sea-borne trade of India directly and indirectly demonstrates the existence and development of a national shipping and ship-building."[3]

It would appear that inspite of detractors, who call the Hindus "*Kūpamaṇḍūkas i.e.*, 'frogs of the well,' colonisation was advocated[4] and Chāṇakya gives some information regarding this interesting subject.

Trade-routes were then in existence, and Chāṇakya observes that "Land and waterways are the roads of traffic," which would demonstrate the advantage of trade-routes.[5] There is an

[1] Diodorus Siculus, ii. 74.

[2] P. 88 (McCrindle's Edition).

[3] *History of Indian Shipping and Maritime Activity*, p. 81. *Cf.* also pliny vi. c. 22. "The sea between the island Ceylon and India is full of shallows not more than six paces in depth but in some channels so deep that no anchors can find the bottom. For this reason ships are built with prows at each end to obviate the necessity of their turning about in channels of extreme narrowness In making sea-voyages the Taprobane mariners make no observation of the stars and indeed the Greater Bear is not visible to them which they let loose from time to time and follow the direction of their flight as they make for land."

[4] VII. 11.

[5] VII. 6.

interesting discussion regarding the comparative merits of land and sea-routes.[1] It would appear that the older class of authors advocated water-routes "in as much as they are less expensive, but productive of large profit." But Kauṭilya preferred land routes, "for water-route is liable to obstruction, impermanent, a source of immense dangers and incapable of defence, whereas a land route is of the reverse nature." It is quite likely that to this policy of advocating land routes was due the "Royal Road" from Pāṭaliputra to the Punjab. Further, of the water-routes, our *Āchārya* was of opinion that "of water routes, one along the shore and another in mid-ocean, the route along and close to the shore is better, as it touches at many port-towns." Kauṭilya also advocated river-navigation (perhaps as distinguished from ocean navigation) as it was uninterrupted and was of avoidable or endurable dangers.

Kauṭilya preferred trade routes with the south to those with the north, for the latter afforded opportunities of trading in blankets, skins and horses, while the south could deal with more valuable products such as conch-shells, diamonds, precious stones, pearls and gold which were then available in plenty in the south.

[1] VII. 7.

Dr. Rhys Davids remarks that in the pre-Buddhistic literature, there is nothing about the trade-routes.[1] The extracts from Kauṭilya and Megasthenes however, prove the contrary.

The references in the Grecian accounts of this period go to prove that industries were well-organised and well-looked after. As we know, the fourth class consisted of the artisans, handicraftsmen,[2] and exceptional were the privileges of this class, for not only were the artisans exempted from paying taxes, but were also allowed maintenance from the royal exchequer.[3] Any one who caused an artisan to lose his eye or his hand was liable to the penalty of death. It was evidently with all these objects in view that the first Municipal Board was entrusted with the superintendence of everything relating to the industrial arts, and the fourth Board supervised trade and commerce, thorough supervision of weights and measures and the products sold in season by public notice.[4]

[1] *Buddhist India*, p. 102.

[2] *Vide* Megasthenes, p. 42, and Arrian, p. 211 (both McCrindle's edition). *Cf.* also the duties of the officer *Saṅgāthadhakṣya* mentioned by Chāṇakya who had to detect false weights, measures and balances and to regulate sales.

[3] Megasthenes, p. 42. Arthaśāstra also observes the same thing: "Those who conspire to lower the quality of the works of artisans, to hinder their income or purchase shall be fined." (IV. 2.)

[4] Megasthenes, p. 87. Strabo, p. 54.

Cf. The remarks of Mr. V. A. Smith, *Early History of India*, p. 127.

Evidently the Mauryan administration regarded all these as important and the devotion by Chāṇakya of a chapter to questions relating to the protection of artisans shows it.[1] That artistic work developed greatly is shown by the fact that even in those days, the Indians wore robes worked with gold and ornamented with precious stones, and flowered garments made of the finest muslin.[2] And it was for this reason that Megasthenes remarked that the Indians were also found to be well skilled in the arts.[3] Everything would point to the high state of civilization and culture which the Maurya empire attained. And the Historian of the Mughul period was perfectly justified when he referred to the adoption of the Hindu system of administration by the Muhammadan emperors, for no better ideal could be found than that in the administrative machinery of Chandragupta and Aśoka.

I have tried to place before you a few side-views showing how our forefathers regarded all these things. Years ago we could not even think that these things existed among the ancient Hindus but as the poet has observed :—

> " 'Tis coming up the steep of time,
> And this world is growing better,
> We may not see its dawn sublime,
> Yet high hopes make the heart throb lighter."

[1] Book IV, Chap. 1. [2] Megasthenes, p. 70. [3] *Ibid*, p. 31.

Hopes are indeed high and the day would not be far away, if we all can work together in a spirit of concord and cordiality and co-operation, when the knowledge of all the lost glories of our dear motherland would be within our reach.

LECTURE VI

Economic Life in the Jātaka

The subject of my sixth and last lecture is *Economic Life in the Jātaka.*

Full four decades ago, Mrs. Rhys Davids, while publishing a translation of some of the Jātaka tales or Buddhist Birth Stories, introduced it with the following words: "The Buddha, as occasion arose, was accustomed throughout his long career, to explain and comment on the events happening around him, by telling his disciples of similar events that had occurred in his own previous births. The experience, not of one life-time only, but of many lives, was always present to his mind, and it was this experience he so often used to point a moral, or adorn a tale. The stories so told are said to have been reverently learnt and repeated by his disciples, and, immediately after his death, 550 of them were gathered together in one collection, called the Book of the 550 Jātakas or Births, the Commentary to which gives for each Jātaka, or Birth story, an account of the event in Gotama's life which led to his first telling that

particular story. Both Text and Commentary were then handed down intact, and in the Pali language in which they were composed, in the time of the Council of Pātna, and they were carried in the following year to Ceylon by the great missionary Mahinda. There the Commentary was translated into Sinhalese, the Aryan dialect spoken in Ceylon; and was retranslated into its present form in the Pali language in the fifth century of our era." Thanks to a guild of European scholars, the Pali and the English editions have been made available in an easily accessible form and it is also a matter of pride and congratulation that the first Volume of an edition in Bengali—for the first time a provincial language has been utilized—is out and the second Volume will also soon see the light.[1] The learned translator is no other than a product of our own University, Rai Sahib Ishan Chandra Ghosh, a veteran educationist. The materials of to-night's paper will be based on these Buddhist Birth Stories. If any further opportunity is given to me, I shall devote myself to other Buddhist books, showing more fully the economic condition of India during the Buddhistic age. The first articles on this subject were contributed by Mrs. Rhys Davids to whom our best thanks are due. Following

[1] The Second Volume is also out, while the third is in the Press.

her learned articles, her husband, Dr. Rhys Davids incorporated in his *Buddhist India* a chapter on the Economic condition of India. We must bow down in a deep-debt of gratitude to Dr. and Mrs. Rhys Davids for their labors in this direction. So far as the *Jātaka* are concerned, their growth occupied a period that had its commencement possibly before the Mauryas. In fact, some of the stories were very likely known from even earlier times. It is unnecessary for me to discuss the importance of such a book for the social, political, and economic ideas of an important period of culture in ancient India can be very well-studied from it, and I commend to all students of ancient Indian history to read them thoroughly, no matter whatever aspect of life they want to study.[1]

If trade and commerce are indications of the growth of culture in any age, we must admit that the ancient Indians in the age of the *Jātaka* had attained a high state of culture[2] and the very first *Jātaka*, the *Apaṇṇaka-Jātaka* gives us an idea about it. In the city of Benares when it was being ruled by Brahmadatta, Bodhisatta,

[1] See in this connection the Introduction to the *Social Organisation in North-East India* (Calcutta University Edition, p. viii).

[2] "Undoubtedly the statements contained in the Jātaka relate to oversea trade as well as to inland trade" (Fick: English edition, p. 268). And again, "Caravan traffic cannot have been small, either with regard to the distance traversed or with regard to wares carried" (p. 272).

who was born in a merchant's family used to trade with five hunderd carts.[1] He had a rival in a young, stupid blockhead of a merchant. At one time both of them loaded their carts with the costly wares of Benares and Bodhisatta as the wiser merchant induced the other to travel first, while the latter thought that, by starting before the other, he would have many an advantage, the most important of which was that he could fix his own price for the barter of the goods, as being the first on the spot; the former knew that he would also have these advantages for he would not have to haggle over prices and would be able to barter his wares at the prices already fixed.

The same *Jātaka*, along with the *Vaṇṇupatha-Jātaka* throws a flood of light on the difficult way in which trade was carried on by these caravans. They had to take with them large water-jars full of water. Whenever the wind blew in the teeth, the leaders rode in front, in their carriage with their attendants round them, in order to escape the dust, but when the wind blew from behind them, they rode in a like fashion in the rear of the column. All the day

[1] *Jātaka* stories all have 500 Carts. Vol. 2—*Khurappa-Jātaka* refers to 500 waggons travelling together. Vol. 3—*Gumbiya-Jātaka* speaks of 500 Carts for trading purposes. Vol. 4—*Mahāvāṇija-Jātaka* speaks of 500 cartloads of merchandise. But, *Asaṁkiya-Jātaka* (Vol. 1 p. 185) speaks only of a mercantile caravan and does not speak of the number of carts and carriages.

long they kept on the march, and at sunset they unyoked their carts, and made an encampment. The men and the oxen took their supper early and the oxen were made to lie down in the middle with the men round them. The leader of the caravan with the leading men of his band had to stand on guard, sword in hand, through the three watches of the night waiting for the day to dawn. On the morrow at day-break, when his oxen were fed and every thing needful done, he discarded his own weak carts for stronger ones and his cheap goods for the most costly of the derelict ones. Then he went on to his destination where he bartered his stock for wares of twice or three times their value.

It would also appear that the merchants very likely combined not only in their trade, but also in their amusements, reminding us of their guild life within the cities.[1] These caravans had their guides[2] who were handsomely paid for their trouble in guiding and defending them, when necessary, from the attacks of robbers.

With reference to this caravan trade, two things deserve more than a passing notice. We find in the *Mahājanaka-Jātaka*[3] that "seven caravans with their beasts embarked on

[1] Vol. 2—*Guttila-Jātaka* speaks of the merchants clubbing together. *Cf.*, Also, *Mahāvāṇija-Jātaka*, IV, p. 221.

[2] *Khurappa-Jātaka*, Vol. II, 265.

[3] Vol. VI, No. 539.

board," when the ship containing these caravans made seven hundred leagues, a significant fact, indeed, proving beyond the possibility of a doubt that there was extensive trading by sea. One important line in the *Mahāvāṇija-Jātaka* goes far to prove that there was something like, what we may call, international trade. "Merchants from many a kingdom came, and all together met, chose them a chief and straight set out to get a treasure." Details would have been more interesting as to what country these merchants came from.

While in the *Mahājanaka-Jātaka* we have an incontrovertible fact, however meagre the details are, regarding the sea-faring activities of the people of that age, we have in a number of other tales ample references to their maritime activities.

In the *Valāhassa-Jātaka* which reminds us of the sirens and other akin creatures, we are referred to the case of five hundred ship-wrecked traders,[1] of what country unfortunately we do not know. In the *Suppāraka-Jātaka* we are told of a body of merchants who started in their ship upon the high seas and for seven days, the ship sailed upon the seas, starting from the sea-port town of Bharukaccha. The ship in going astray passed through several oceans

[1] Vol. II, No. 196.

and four months were spent by the merchants while the vessel had been voyaging in far distant regions. The *Śaṅkha-Jātaka*[1] records the trouble of a Brāhmaṇa who, when his store of wealth was gone because of his charities, thought of taking a ship to sail for the gold country[2], which he did sailing upon the high seas. In the *Sammuddavāṇija-Jātaka*, we are told of a great town of carpenters and as the people used to upbraid every carpenter they met with and interfered with their work, they could live there no longer. "Let us go into some foreign land," said they, "and find some place, or other to dwell in." They built a ship—a significant fact, which we shall deal with later on—launched her into the river, and took her away from that town and taking their families with them, proceeded in due course to the ocean, sailing at the wind's will, until they reached an island that lay in the midst of the sea.

The sixth volume of the same inexhaustible source[3] brings before us the adventures of a prince, who inspite of his mother's injunctions, for "the sea had many dangers," got together his stock-in-trade, put it on board a ship

[1] Vol. VI, No. 442.

[2] The gold country is said to be the districts of Burma and Siam. *Jātaka* 360 (*Sussondi-Jātaka*) refers to setting sail from Bharukaccha to the Golden Land.

[3] *Mahājanaka-Jātaka*, Vol. VI, No 539.

with some merchants bound for *Subaṇṇabhūmi* and with seven caravans and their beasts, embarked on board. Two of the *Jātaka* give us very clear indications of India's having commercial connection with Ceylon and with Babylon, if not with other foreign countries. The former was, as Mrs. Rhys Davids puts it, "another commercial objective and one associated with perils around which legends had grown up."

The kingdom of Bāveru[1] is referred to in the *Jātaka* of that name. We are told that some Indian merchants went from Benares to the kingdom of Bāveru, bringing on board a ship with them a foreign crew. Prof. Bühler referring to it has very rightly observed, "The now well-known *Bāveru-Jātaka*, to which Prof. Minayef first drew attention, narrates that Hindu merchants exported peacocks to Bāveru. The identification of Bāveru with Babylon is not doubtful."[2] And further, "from the

[1] Vol. II, p. 89.

[2] Regarding this Fick has observed, "the existence of the mere name shows that the city was known by name in the age to which our source relates; probably, Indian sailors went to Babylon and spread reports on their return home about the city and its wonders, so that from that time onward in every story in which the ship-wrecked played a part, the name of the city of Bāveru appeared, the mention of which served to make the listeners expect something wonderful." (Calcutta University edition, p. 270). This view, however, has not been generally accepted. Prof. Sayce observes, "There was trade between Babylonia and people who spoke an Aryan dialect and lived in the country watered by the Indus."

age of the materials of the Jātakas, the story indicates that the *Vanias* of Western India undertook trading voyages to the shores of the Persian Gulf and of its rivers in the 5th, perhaps even in the 6th century B.C. just as in our days. This trade very probably existed in much earlier times, for the Jātaka contain several other stories, describing voyages to distant lands, and perilous adventures by sea, in which the names of the very ancient Western parts of Śūppāraka (Supara) and Bharukaccha (Broach) are occasionally mentioned."

We have referred to the system of guides of caravans, travelling overland. There were also pilots. In the *Suppāraka-Jātaka* mentioned previously, we find that a pilot was engaged. This pilot was born in the family of a master-mariner and soon gained a complete mastery over the art of seamanship. He had to go to the sea so often that he injured both his eyes and though the head of the mariners, he could not ply any more the mariner's trade. But, even then, his services were requisitioned and he was made the skipper of a ship. It would be superfluous to go into details but we may as well just cite three more references :—

(1) In the *Cullaka-seṭṭhi-Jātaka* we find references to a " sea-trading friend " who brought the news of the arrival of a large ship in port. The port referred to here was that of Benares

which enjoyed at that time both an inland and marine trade.[1]

(2) The *Losaka-Jātaka* speaks of a ship putting out to sea and coming to a complete standstill in mid-ocean.[2]

(3) The *Aṭṭhāna-Jātaka* refers to "a full rigged-ship for distant seas."[3]

Well might Dr. Fick say, when in describing a caravan passing through sandy deserts, "its march is compared with a journey through the sea when it is narrated that one entrusts the lead to a 'land tax-Collector' who directs the caravan with the help of astronomy. We find clearly expressed here, acquaintance with navigation and the knowledge of the starry heavens required for this. Also another thing, which the Indians employed, like the sea-faring Phœnicians and Babylonians of ancient times, for finding the direction during navigation, we find mentioned in the Jātakas namely "direction-giving crows" (*diśakāka*). They showed the navigators, when they lost sight of the land, as they flew towards the lands, in what direction the coast was to be found."[4]

[1] Vol. I, p. 20. (English Edition).

[2] *Ibid* Vol. I, p. 110.

[3] *Ibid* Vol. III, p. 284.

[4] Fick, however, considers that "Navigation along the coast and not navigation in the open sea is throughout meant when the Jātakas speak of overseas trade." This view, is however, narrow and is not generally accepted. See *ante* p. 44.

Closely connected with the question of commerce is the question of ship-building, which we have already incidentally referred to. Commerce could not have flourished in the period of the *Jātaka*, if India and her sons had not been in a position to build ships. *Jātaka* 546, the *Mahāummagga*, gives us a clear indication of ship-building. Arrived at the Ganges bank, the great Being called Ānandakumār and said to him, "Ānanda, take three hundred wrights, go to the upper Ganges, procure choice timber, build three hundred ships, make them cut stores of wood for the town, fill the ships with light wood, and come back soon."

Jātaka 466, which we have quoted already in connection with the voyage of a thousand families of carpenters, refers also to the cutting of trees, building a mighty ship and launching her into the river, while the *Śaṅkha-Jātaka*[1] speaks of a ship 800 cubits in length, 600 in breadth and 20 fathoms in depth.[2]

Some doubt is raised about trading in the high seas, but if even fishermen could be seen "throwing their nets in the high seas,"[3] I do not understand why traders animated by trading

[1] It had 3 masts made of sapphire, cordage of gold, silver sails and the oars were of gold.

[2] Ship-building is also referred to in the *Milinda Panha*: "A ship pieced together with timber of all sorts is broken up by the force of the violence of the waves."

[3] No. 402.

spirits and love of profits should not be so venturesome as to go out of the depths and sail in the ocean with a view to go to islands for purposes of trading.

To facilitate trade and commerce, instruments of credit were in existence in the Buddhistic age.[1] We hear of signet-rings being used as deposits or securities and even wives, children and teachers were pledged.[2] A daughter was given as a slave by her father to a merchant as a security for the accumulated interest. Promissory notes[3] were in existence, though these appear to have been simple registrations as between borrower and lender and their respective heirs.[4]

It appears that in the Buddhistic age, there was the system of having "correspondents," who afforded facilities for trade. *Jātaka* No. 90 clearly gives us the idea about it, as well as a picture of these days regarding trading matters.

On the borders, there lived a merchant who was a correspondent and a friend of Anāthapiṇḍika, the famous merchant. There came a time when this merchant loaded five hundred carts with local produce and gave orders to the

[1] *Buddhist India*, p. 101.

[2] A daughter was given as a slave by her father to a merchant as security for the accumulated interest. No. 436.

[3] *Iṇa-Paṇṇāni*. No. 256 speaks of a bankrupt who asked his creditors to bring with them *Iṇa-paṇṇāni* for settlement.

[4] See J. R. A. S. 1901 (879-880).



ANĀTHA-PIṆḌIKA'S GIFT OF THE JETAVANA PARK

To face p. 148.]

men in charge to go to the great merchant Anātha-piṇḍika and barter the wares in his correspondent's shop for their value and bring back the goods received in exchange. So they came to Sāvatthi and found Anātha-piṇḍika. They made him a present and told him their business. "You are welcome," said the great merchant and ordered them to be lodged there and provided them with money for their needs. After kind enquiries regarding their master's health, he bartered their merchandise and gave them the goods in exchange. Then they went back to their own district and reported what had happened. What follows is not of course what ought to have been done by the border merchants but still it affords us a glimpse of what we are dealing with.

Shortly afterwards, Anātha-piṇḍika similarly despatched five hundred carts with merchandise to the very district in which the others dwelt; and his people when they had got there, went, present in hand, to call upon the border merchant, Anātha-piṇḍika's correspondent. "Where do you come from?" asked he; "from Sāvatthi," replied they; "from your correspondent Anātha-piṇḍika." "Any one can call himself Anātha-piṇḍika," said he with a sneer, and taking their present, he bade them begone, giving them neither lodging, nor help, so they bartered their goods themselves, and brought back the

wares in exchange to Sāvatthi, with the story of the reception they had. The issue of this sort of treatment was not at all satisfactory to the border merchant, for Anātha-piṇḍika's men on another occasion had their full revenge for the ill treatment received, but details of this are unnecessary for our present purpose.

One more story, a very important one, from the economic point, not only for the large number of economic terms, but also showing how even in those early days, trade was carried on. A man commenced his life by selling a dead-mouse to a tavern for its cat. With this coin, he got molasses and drinking-water in a pot which he distributed to flower-gatherers, each of whom gave him a handful of flowers which he sold. He then went to the vicinity of a city gate, with a jar of water and supplied 500 grass-cutters with water to drink. Said they, "You have done us a good service, friend. What can we do for you?" "Oh, I will tell you when I want your aid," said he and as he went about, he struck up an intimacy with a land-trader and a sea-trader. Said the former to him, "To-morrow there will come to town, a horse-dealer with five hundred horses to sell." On hearing this piece of news, he said to his friends, the grass-cutters, "I want each of you to-day to give me a bundle of grass and not to sell your own grass till mine is sold." "Certainly,"

said they and they delivered the five hundred bundles of grass at his house. Unable to get grass for his horses elsewhere, the horse-dealer purchased our hero's grass for a thousand pieces. Only a few days after, his sea-trading-friend brought him news of the arrival of a large ship in port; and another plan struck him. He hired a well-appointed carriage, which plied for hire by the hour. Having bought the ship on credit, and deposited his signet-ring as security he had a pavilion pitched hard by, and said to his people as he took his seat inside, "when merchants are being shown in, let them be passed on by three successive ushers into my presence." Hearing that a ship had arrived in port, about one hundred merchants came down to buy the cargo only to be told that they could not have it, as a great nerchant had already made payment on account. A study of the above story containing all those economic terms cannot but make one think of the stage of development reached by the people of the age towards trading habits.

I have already observed, that India in the age of the *Jātaka* had reached a high state of civilisation and the existence of a number of coins further supports our view. And Mrs. Rhys Davids in this connection truly observes, "The Buddhist literature reveals a society having the full use and enjoyment of plentiful

coinage. The worth of every marketable commodity, from a dead mouse and a day at the festival, up to all kinds of fees, pensions, fixed loans, stored treasure and income is stated in figures of a certain coin and its fraction and that is either explicitly stated or implied to be the *Kahāpaṇa*."[1]

In the *Jātaka* frequent mention is made of coins without denomination, *e.g.*, a thousand pieces,[2] eighty crores [3], and of any number of references of which we indicate a few. Coins which have been named are, amongst others, the following:—

(*a*) Kahāpaṇa [4]
(*b*) Nikkha [5]
(*c*) Māsaka [6]
(*d*) Aḍḍha-māsaka [7]
(*e*) Kākaṇika [8]
(*f*) Kāḷakahāpaṇa [9]

[1] J. R. E. S., 1901, p. 318. Also J. R. A. S., 1901, p. 876. "The whole of the Buddhistic literature testifies to the fact that ancient systems of simple barter as well as of reckoning value by cows or rice-measures, had for the most part been replaced by the use of a metal currency, carrying well-understood and generally accepted exchange value."

[2] Nos. 254, 402 and 537.

[3] Nos. 23, 28, 73, 163, 257, 421, 439, 442, 447, 468, 481, 497, 513, 515, 519, 522, 531, 534, and 547.

[4] Nos. 257, 284 & 541.

[5] Nos. 276, 340, 546 (where golden Nikkhas have been distinctly mentioned).

[6] No. 288. [7] No. 546. [8] No. 4. [9] No. 536.

(*g*) Suvaṇṇa [1]
(*h*) Suvaṇṇamāsaka.

The names of the countries mentioned with details of trade-relationship would go to prove the commercial connection which Benares at any rate, which represented the centre of civilisation in those days, from its frequency of mention, enjoyed. References can be traced to the following countries among others:—

(1) North-west country [2]
(2) Golden land [3]
(3) Kamboja [4]
(4) Kampilliya [5]
(5) Kapilavāstu [6]
(6) Kośala [7]
(7) Madhurā [8]
(8) Sāketa [9]
(9) Kosambī [10]
(10) Kuru [11]

[1] No. 540.
[2] The references are to the pages in the English edition. I. 178, 216.
[3] II. 149, 251 & 252; III. 124; IV. 227; V. 31, 32, 37, 246, 258, 264, 279; VI. 22, 126, 134,153.
[4] VI. 110.
[5] III. 52, 230; V. 11, 18, 54; VI. 198, 224.
[6] I. 85; II. 63; IV. 4, 32, 92, 96, 179 & 199; V. 219-221 & VI. 246.
[7] I. 50, 77, 91, 105, 118, 164, 172, 183 & 184; III. 21, 191 & 291; IV. 83 & V. 116, 226, 231.
[8] IV. 99. [9] IV. 50.
[10] I. 47, 206; II. 43, 139, 233, 289; III. 43, 139, 233, 289; IV. 17, 36, 246; VI. 120.
[11] II. 150, 251; III. 241; IV. 227, 275, 276; V. 31, 246.

(11) Kurukshettra [1]
(12) Kusāvatī [2]
(13) Kuśinārā [3]
(14) Mithilā [4]
(15) Pañcāla [5]
(16) Sindh [6]
(17) Ujjayinī [7]
(18) Videha [8]
(19) Ceylon [9]

And, as in the halls of the great merchants places were set apart "for foreign merchants to store their goods," [10] we may surmise the importance of foreign trade [11] and the attention which was paid to it.

Trade routes facilitated commerce and Dr. Rhys Davids traces three trade-routes.[12]

1. *North to South-west.*—Sāvatthi to Patiṭṭhāna and back, the principal stopping places being Māhissati, Ujjeni, Gonaddha, Vedisa, Kosambi and Sāketa.

[1] VI. 141. [2] I. 231; V. 141, 146 & 147. [3] IV. 93.
[4] I. 31, 32; II. 230 & VI. 54, 68. [5] IV. 248 & 268.
[6] I. 61, 63; II. 116, 233; III. 5; V. 132. [7] II. 172. IV. 244.
[8] I. 31; II. 27, 231; III. 222, 230; IV. 201, 202; V. 50, 86; VI. 19, 28, 34. [9] II. 127-129.
[10] No. 546.
[11] From another point of view also, merchants were highly respected, for they were the most liberal in that age. The first two disciples of Buddha were merchants. Openhanded liberality towards Buddhism was shown by merchants and Anātha-piṇḍika and others were extremely liberal towards the propagation of the Faith.
[12] *Buddhist India*, p. 103. *Cf.* my previous lecture with reference to trade-routes.

2. *North to South-east.*—Sāvatthi to Rājagaha. "The route is never direct, but always along the foot of the mountains to a point north of Vesāli and only then turning south to the Ganges. The stopping places were, Setavya, Kapilavastu, Kusinārā, Pāvā, Hatthi-gāma, Bhaṇḍagama, Vesāli, Pātaliputta and Nālandā."

3. *East to West.*—The main route was along the great rivers, along which boats plied for hire. The boats went right down to the mouth of the Ganges and then either across or along the coasts to Burma.

Besides the above, he refers to other minor trade routes, *viz.*, Videha to Gandhāra, Magadha to Sovīra, Bharukaccha round the coast to Burma, from Benares down the river to the mouth of the Ganges and thence on to Burma and from Champā to the same destination.

In addition to the above, we also find caravans going from east to west and west to east, both from Benares,[1] and Dr. Fick was justified in coming to the conclusion that "Big trade routes cross the land in all directions and carry an exchange of goods between the several and (judged by their products and necessities) widely different parts of India; there was manifestly brisk trade between the eastern and the western parts."[2]

[1] No. I.

[2] Fick: Calcutta University Edition, p. 272.

The conclusion which one has to arrive at, by even a cursory glance at the *Jātaka* is, that the merchants were rich, for nowhere do we find mention of any merchant who was worth less than eighty crores, though as I have mentioned before, we are not told whether these eighty crores were of gold or silver or copper.[1] We are informed that Anātha-piṇḍika lavished fifty-four crores on the faith of the Buddha and the magnitude of his wealth may be imagined from the fact that many traders borrowed money from him on their bonds, to the amount of eighteen crores and the great merchant never called the money in. Indeed we are told that in addition to all these, eighteen crores of family property were washed to sea.[2] A nephew of this great merchant had squandered an inheritance of forty crores gold. When this prodigal nephew visited his uncle he gave him another thousand and bade him trade with it. This was also squandered when once more he was given five hundred.[3] In this connection we are told of a merchant who had a treasure of four hundred millions. Another merchant named Suciparivāra had also eighty crores of coins.

[1] No. 78. Mrs. Rhys Davids supposes these to be copper coins. If the copper Kahāpaṇa be taken as the unit, the sum becomes approximately, as she has herself calculated, equated to £ 2,750,000.

[2] Introduction to No. 40.

[3] *Bhadra-ghata-Jātaka.*

A Brāhmaṇa merchant's wealth can be gauged from the fact that daily he gave in alms six hundred thousand pieces of money, in addition to bounties to way-farers and beggars.[1] Another Brāhmaṇa is referred to who wanted to give his wife his fortune amounting to eighty crores.[2] A merchant is spoken of as possessing a fortune of eighty crores.[3] Two merchants are referred to, one of Magadha and the other of Benares each having eighty crores,[4] while another merchant of Sāvatthi was worth *only* eighteen crores. A wealthy house-holder of Benares also possessed eighty crores.

While the above gives us a summary of the wealth of some of the merchants, we find that some of the kings of that age must have been immensely rich and we may say extravagant also, if we are to place any reliance on the *Bhojājānīya-Jātaka* [5] where the king is seen taking his food in a golden dish worth a hundred thousand pieces "of money." Another king was so fastidious about his eating, that on one dish he spent one hundred thousand pieces.[6] He ate out of his doors; for he wished to confer merit upon many people by showing them the costly array of his meals; he therefore caused a pavilion adorned with jewels to be set

[1] Vol. III, No. 442.
[2] No. 443.
[3] No. 482.
[4] No. 131.
[5] No. 23.
[6] No. 260.

outside the door, and at the time of eating, he had this decorated. Then he sat upon a royal dais made all of gold, under a white parasol with princesses all around him and ate the food of a hundred delicate flavours from a dish which cost one hundred thousand pieces of money.

We are also told that at one time a thousand robes, each worth a thousand pieces of money, were brought to the king.[1] Likewise, once the Bodhisatta wore a Kāśi robe worth a hundred thousand pieces of gold [2] and a pair of shoes presented to the Buddha cost one thousand pieces, while the jewelled trappings of the "white luck elephant" of the Benares king was priced at twenty lakhs pieces. An archer was paid one thousand pieces for a fortnight,[3] and once a thousand pieces daily,[4] occasionally at hundred thousand a year [5] and a teacher received one thousand pieces for teaching a pupil only seven days.[6] A fish cost a thousand pieces,[7] a fowl cost over six thousand pieces,[8] while a thousand pieces were paid to runners and tumblers, singers and dancers,[9] and so much as ten millions were spent on a festival.[10] That would give us an idea as to how the rich lived. But inspite of these high figures, we must say that living was very cheap in those days. An *aḍḍhamāṣaka* worth of meat

[1] No 157. [2] No. 546. [3] No. 80.
[4] No. 522. [5] No. 181. [6] No. 522. [7] No. 288.
[8] No. 254. [9] No. 291. [10] No. 163.

was sufficient, a small copper coin was enough for ghee or oil, eight *kahāpaṇa* could purchase a decent ass,[1] while a pair of oxen would cost only twenty four pieces.[2] A slave could be had for one hundred pieces only,[3] a carriage could be hired by the hour for eight copper pieces,[4] and two half *māṣakas* could buy a garland, perfume and strong drink to enable a man and woman to enjoy themselves.[5] In consideration of the present time, living seems to have been very cheap then, though the details we have given above are hardly sufficient for the purpose. "It is not impossible that with such materials, when applied and compared, the historical economist might be able to contribute valuable evidence about this very problem of the comparative time at which each work, each portion of work, was compiled."[6]

I have tried to give a brief outline of the economic life in the *Jātaka*. I wish I could have given you more details, more facts of this very interesting period of ancient Indian life and culture. It is not possible within the short compass of time allowed to me. But whatever

[1] No. 546. [2] No. 257. [3] No. 39. [4] No. 1.

[5] I beg to acknowledge my deep gratitude to Mrs. Rhys Davids and to her articles in the J. R. A. S. and J. R. E. S. I have added more details, and have verified the references with the English Edition which is more easily accessible than the Pali one which she has referred to.

[6] J. R. A. S., 1901, p. 886.

it may be, let us remember the adage of the *Jātaka*, "where faith is, no gift is small" and if, in placing before you these short sketches, I have been able to give you even a bit of impetus towards your studying the ancient economic history of India, I shall deem my labour an unqualified success. These are meant to excite your curiosity, your love for the old mother-land, for let us all be united to unravel her mysteries, and let us acclaim with the poetess:—

> "Lo, we would thrill the high stars with thy glory,
> And lead thee again in the forefront of glory."

And let us all remember that a real re-generation, civilization and advancement of India, materially, morally and politically depends upon a long continuance of the British rule. And as Lord Curzon, the great Viceroy, so aptly said, "We are ordained to walk here in the same track together for many a long day to come. You cannot do without us. We should be impotent without you. Let the Eng-lishman and the Indian accept the consecration of a Union that is so mysterious, as to have in it something of the divine and let our common ideal be a united country and a happier people."

MR. PRESIDENT, GENTLEMEN AND BROTHER-STUDENTS,

Let me thank you again and again for your indulgence in giving me such a patient hearing. The all-absorbing subject of economic history of our ancient mother-land has made you lose so much time. The subject is a vast one, an interesting one and an inspiring one. In my first lecture I explained my difficulties to pay more attention to it, but if I have been able to draw *your* attention to it and to give an impetus which may lead some of you on to study it, I shall deem my labour a full success. And may I take the opportunity of appealing to your President, who has done so much for education, who has in fact consecrated his life for it, to see that greater attention is paid to the study of ancient Indian Economic History? Let me, in conclusion, pay my humble debt of gratitude to him for the inspiration which he has all along given to me in my career. Without Sir Asutosh and his ungrudging care and help, I would not have been able to do, what little—it is indeed "less than very little"—I have tried to do. Indeed, his best wishes are showered on all who have the mind to work and I have not the

least doubt that through his blessings you will continue to enjoy the blessings of true education as well as success in life. As the poet has truly observed :—

"Let knowledge grow from more to more,
But more of reverence in us dwell,
That mind and soul according well
May make one music as before
But vaster."

INDEX

A Few Opinions.

Dr. Sylvain Levi.—"The subject treated is a very interesting one and I see that you have brought together a great deal of useful information from different original branches of Sanskrit and Pali Literature. I wish that in a later work you take the same matter more fully, in order to sketch a real history of Economics in Ancient India. History in my opinion is the chief need of the present; the more it is difficult, the more it is necessary to trace it. If you believe that the time has not come for such a grand task, I beg you to prepare complete monographs for every important work or collection of works, taking it by itself, with no external connection. How useful it would be for you to have a full collection of references to economics in the Mahābhārata, for instance, and you are so qualified for it. I hope I shall have an opportunity to have some talks with you when I again come to Patna."

Dr. A. A. Macdonell.—"I notice that you base your statements on evidence and are evidently familiar with the best authorities for your purpose. Most Indian scholars are not yet sufficiently trained in the principles of historical evidence, but you appear to be adequately equipped for further research in economic history."

Mrs. C. A. F. Rhys Davids.—"I do not see that you need any preface to your work and your studies should certainly not depend as to their continuance on anything so unimportant as the getting or not getting such a word from me. The service which you are rendering to the cause of the study of ancient Indian economic history is your Introduction. Truth is Truth and you are serving Truth."